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# THE BADGER









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A BADGER DRINKING.

*Photo by F. Pitt, Bridgnorth.*



# THE BADGER

AFIELD AND UNDERGROUND

By

H. MORTIMER BATTEN, F.Z.S.

*Author of "Habits and Character of British  
Wild Animals," "Many Trails," "Northern  
Observations of Inland Birds," "Romances  
of the Wild," etc.*

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## FOREWORD

LEST the reader set out to peruse the contents of this book under the impression that it is devoted to sport afield, and, arriving at the conclusion, discover that he has been let down, I feel that a brief foreword of explanation is necessary.

To obtain a maximum of interest from sports afield, one must have a deep-rooted interest in the natural history side of the question, and this book deals with the natural history of the badger from the viewpoint of the sportsman as from that of the Arcadian. Its object is to lead to a better understanding of one of the most peculiar, ancient, and interesting beasts that we have, and one which, it is pleasant to contemplate, is increasing in numbers throughout the country.

Such periodicals as *The Field*, *Country Life*, and *The Scottish Field* regularly contain articles concerning sport with Brock, and whereas it is possible fully to describe a badger digging affray in the brief space of a periodical contribution, it is impossible to deal helpfully with the animal's life unless a good many pages be devoted to the purpose. Realising, then



that the sporting side of the question is already attractively served in breakfast-table form, I have touched upon that side only in so far as it bears upon the ways of the animal and has affected its habits.

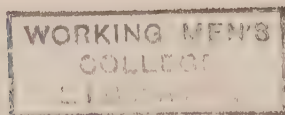
I think this is a reasonable view to take in a book devoted to the Life of a beast, and that the methods we choose to employ in bringing that life to a conclusion are rather outside the scope of such a work.

Having kept badgers as pets, besides having observed them in their natural environment for a number of years, I have acquired a very real affection for the species, and though I have endeavoured to show no biassed feeling up to a reasonable point, I am nevertheless hopeful that these pages will help sportsmen to a sympathetic understanding of a creature whose ways are by no means easily learnt.

H.M.B.

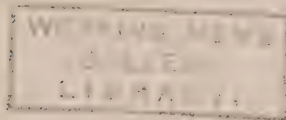
EAST LOTHIAN

1922.



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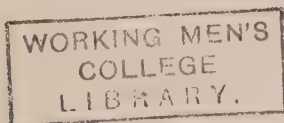






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# THE BADGER

## CHAPTER I

### THE BADGER

IT is not surprising that even within the last decade well-informed writers of the field brigade have alluded to the badger, generally in terms of affection, as the last of the bear family to remain with us ; for while there is little of the quickness, viciousness, and undulating manner of the family *Mustelidæ* in this animal, his ways of rooting for food, his comparative ponderousness of movement and thought, his love of peace, and his love of home all play a part in one's mental picture of the bear family.

But for all his bear-like ways and characteristics, to the musk-bearing weasels, the badger rightly belongs. He is one of the most highly specialised of this distinguished tribe, which includes the most valuable fur bearers that we have ; in his mode of living he has departed from the family characteristics to a pronounced degree, and he stands apart from the rest as essentially a weasel of the earth, of the dark and gloomy passage-ways, just as the otter and the mink



are distinct as essentially weasels of the water, and the martens as essentially weasels of the trees.

The feelings or spoor of the badger are suggestively bear-like, and this fact, coupled with the animal's fondness of honey and the grubs of wasps and wood bees, its habit of nosing about dead logs and scratching among the "pine" needles for insects, all tend to associate Brock with the family Ursidæ. He has the bear habit of recording his reach on the trunk of some favourite tree, but whereas the bear and the fox have played so prominent a part in our own folklore and fable, the ancient badger has been handed down to posterity only as a name. Thus we have Brockdish, Brockley, Brockhampton, Broxborne, Brockenhurst, Brocklesby, Brockshill, and Brocksfield.

In addition to these rather superficial similarities, the hibernating habits of the badger form yet another connecting link with the bear family, and divide him still further from the weasel tribe. It was thought until quite recently that badgers mated immediately before denning up, as do the bears, and anent this point Seton wrote in his standard work on North American animals: "It is an open question whether the hibernating badger mates in spring, like the hibernating ground squirrel, or in the fall, like the hibernating bear. Paul Fontaine states positively

that they pair in autumn before they hibernate. This we know to be the case with the British badger, so that the evidence is strong but not conclusive." But the same writer frankly adds: "The question of gestation of the species is unknown; cannot be guessed at until we know the exact time of mating." This subject will, however, be dealt with in succeeding chapters, in which it is made fairly clear, I think, that the mating season of the badger is the spring.

The only member of the weasel family in which the badger seems to find a faint resemblance is the wolverine. This certainly is no compliment to Brock, but the two have many points in common, however dissimilar they may be in other ways.

The wolverine is the most bear-like of the true killers of his family, and the description of the badger genus applies more strongly to him than to any other member of the weasel family, namely—"they have thick, heavy bodies, short tails, strong legs, front feet immensely powerful, with long claws and developed for digging, and ears very short." The teeth compare as follows:

Wolverine—Inc.	$\frac{3-3}{3-3}$	Can.	$\frac{1-1}{1-1}$	Prem.	$\frac{4-4}{4-4}$	Mol.	$\frac{1-1}{2-2}$	= 38
Badger— Inc.	$\frac{3-3}{3-3}$	Can.	$\frac{1-1}{1-1}$	Prem.	$\frac{3-3}{3-3}$	Mol.	$\frac{1-1}{2-2}$	= 34

The three molars of the badger, especially those of the upper jaw, are, however, very broad, and bear unmistakable witness to the vegetable dietary.

The wolverine is not so subterranean in his habits as is the badger, but nevertheless he is a powerful digger, and the cage which is to retain either a badger or a wolverine must be strong and faultless. Like Brock, the wolverine is a fierce and formidable fighter. His skin is tough, his skull is hard, and his nose is tender. In carriage the two are not unlike, nor in their fighting tactics, but save for these points of resemblance there is a wide gulf between them.

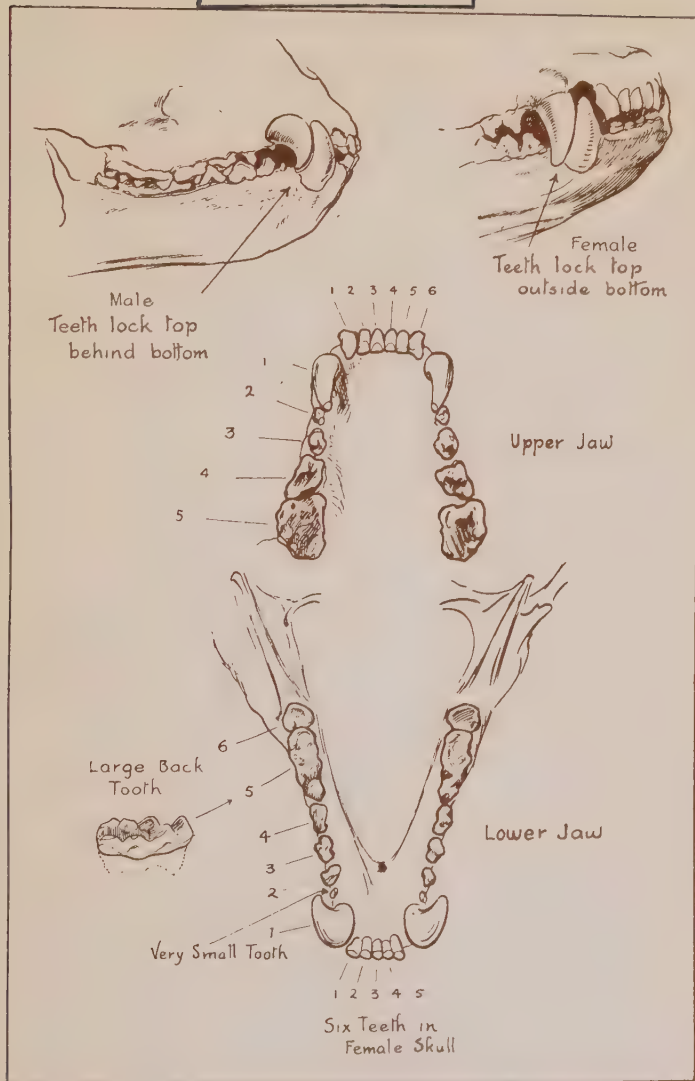
The wolverine is aggressive, vicious, and vindictive. So far as I know he is entirely carnivorous, an eater of carrion, and strongly arboreal in habits. He is also untamable.

The martens, among which ranks the fisher, have no points in common with Brock, save that they do not understand defeat. A Canadian ranger I know watched a fisher raiding a heron's nest, and it returned to the attack several times after it had lost one eye, and its brain was actually penetrated by the bill of one of the defending birds. When the ranger went up he found the fisher suspended in the branches, but it had not abandoned the attack till life was actually extinct.

The badger does not court calamity in this way.



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SKETCHES SHOWING THE DENTITION OF THE BADGER.



He awaits attack rather than going half-way to meet it, and unlike the other members of his family he keeps on good terms with those around him.

The otter and the pine marten are probably the most brilliantly gifted and the most versatile of the weasels, and, according to present classification, the badger falls midway between them. Yet, though Brock may be brilliantly gifted along his own narrow lines, he certainly is not versatile. Much as naturalists have disagreed upon the badger, much as they have been compelled to revise their ideas, abandon their pet theories, and modify their most dogmatic assertions within short periods, and closely as Nature guards certain secrets bearing upon the badger's life, this animal is neither adaptable nor prone to any wide variation in habits. He is much the same beast throughout the length and breadth of our island, whereas the smaller weasels vary very considerably according to their environment.

### **Distribution**

At the beginning of this century Sir Alfred Pease stated that, to the best of his knowledge, there were five or perhaps six different kinds of badgers known throughout the world. His estimate, however, was a conservative one, for, so far as one can judge,

there are at least three distinct varieties in North America alone. The typical North American badger differs from the European species in the extreme fineness of its coat and in colour. This is the badger of Wisconsin and Minnesota, and it is a smaller animal than the European species, weighing on an average about 10 lbs. less.

There is a still smaller American species, which is much darker in the coat, and belongs mainly to California; while, according to the opinions of trappers, there exists on the western slopes of southern British Columbia a third branch of the family which belongs essentially to the thickly timbered mountain slopes, where it lives among the crags.

The typical American badger (*Taxidea Taxus*) belongs almost exclusively to the open sandy plains. Seton comments upon its almost entire absence from the heavily wooded country, in which the woodchuck takes its place. This animal, unlike the forest species, is strictly carnivorous. Its main food consists of ground squirrels, chipmunks, and the like, which it takes from their burrows. Often it makes its abode and becomes firmly established in practically waterless country, which is a curious fact, since badgers are fond of water, and in captivity



drink a good deal. In disposition the American badgers are very similar to our own, and the forest badgers of British Columbia would seem exact counterparts in habits and character, as in size, of the European species.

The range of the badger in North America is limited to the country west of the Mississippi River, and is bounded on the north by the Churchill River—with the exception, perhaps, of the shores of Lake Michigan, from which, according to the Fur Returns, occasional pelts are sent.

The Mittenusk, or typical American species, and the small, dark badgers of the far western States are so dissimilar from the others, particularly as regards dentition, that the genus *Taxidea* has been established for their distinction. So far as I can judge the big badgers of Lillooet and the Kootenays have escaped attention.

The European badger exists almost over the whole of Europe and Asia ; the largest specimens hail from the steppes of Eastern Siberia. In addition we have the honey badger or Ratel, the Indian badger (at least two kinds), and the Chinese and Japanese species.

The Ratel or African species is very similar to our own as regards food and habits. Indeed, the badger family the world over retains its outstanding character-

istics, and varies only in so far as the circumstances of environment adjust its habits. The colour of the Ratel is very distinct; the Somaliland species has no white face markings. Its back is silvery grey, its underparts, including the face and legs, black. The Ratel, as its popular name of honey badger implies, is specially famous for its habit of nosing out and destroying the nests of wild bees, as indeed is our own species when circumstances are such that it can acquire the habit.

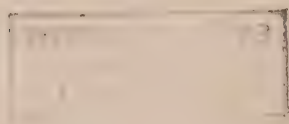
Ratels are much respected by the natives, who assert that they will readily attack man if molested in the open. This is true of the American species, and would probably be equally true of our own, but that the European badger belongs exclusively to the deep forests, and therefore is never caught in the open.

Some years ago I met a cowboy in Montana who had been seized by the foot by a badger he was pursuing. Sighting the animal he rode after it on horseback. Immediately outdistancing it, he leapt from his saddle with the idea of capturing the fugitive, but no sooner had he reached the ground than the badger charged him and gripped his foot, which was very severely mangled ere he managed to drive the animal off by striking it with his revolver.

Seton relates an amusing incident bearing upon the ferocity of the American badger. He says: "On the Upper Yellowstone I met a badger waddling over the prairie. I had a camera with me, and, meaning to get a picture, ran after him. To my great surprise he came rushing towards me, uttering a loud snarling. Fully believing in my ability to avoid attack, if indeed he really meant to make one, I continued to run, when, just as we were within thirty feet of each other, he fell tail first into a shallow badger hole that he had not seen, and I fell head first into another that I had not seen. We both were greatly surprised, quite shocked indeed, but he recovered first. He scrambled out of his pitfall, ran ten feet nearer to me, then dived down his home hole, towards which he had been making from the first!"

Such bravery on the badger's part is doubtless the bravery of desperation, the result of having been caught out, as it were, when he will turn and face man just as will the squirrel who has mistaken a clothes-prop for a tree. It is noticeable that all animals which specialise in one particular walk in life, be it among the trees, in the water, or in the sheltering arms of Mother Earth, are apt to fall foul of sudden and violent panic which takes account of no odds when caught away.

were pale and colourless, besides being weak in the hair and possessing too much under-wool. A few good skins come from Italy, but the best undoubtedly from Siberia and North Wales. There are plenty of badgers in the Vosges Mountains, but generally speaking the animals are to-day rare in France and Germany, though, according to the Fur Returns, 5,100 badgers were killed in Prussia during the winter of 1885-6.



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TAIL VIEW OF A BADGER ON THE ALERT.

*Photo by F. Pitt, Brulgnorth.*





## CHAPTER II

### FOLKLORE AND FABLE

WHEREAS the badger plays practically no part in the folklore and fable of our own country, it has entered considerably into the song and legendary of France and Germany. Moreover, the character and the habits of the badger seem to be better understood by the German peasant than by the people of any other land. According to their fables he is set down as "cousin and friend of the fox, whom he vainly seeks to lead back to the path of virtue, but whose defence he undertakes as a good-natured relative in spite of all the vicious tricks Reynard plays him." This is translated from Vogt, as he conceived the peasant's opinion of the badger, judging from their songs and fables, and what the summing up lacks in the accuracy of relationship it certainly makes up in its knowledge of Brock's ways.

Elsewhere Vogt remarks that in Siberia the badger is so entirely carnivorous that after hibernation he attacks even the herds of cattle in order to slay calves,

## THE BADGER

but he adds that in Germany the badgers live entirely on truffles and roots of all kinds.

In olden times the fat of the badger was used for medicinal purposes. As an ointment it was prescribed as a cure for rheumatism, the cough of the lungs, chilblains, headaches, malignant growths—almost anything, indeed, barring orator's throat and housemaid's knee.

As Sir Alfred Pease remarked—"Evidently a few badgers in the good old days supplied the place of the country doctor."

The gipsies or tinkers of the Highlands still have great faith in the healing powers of badger grease, and were the animal more plentiful it would doubtless vie with the beaver in this respect.

The skin of the badger was at one time regarded of high value on account of its toughness and durability. It was used considerably for making pistol holsters but to-day is regarded as of value only for the hair, the best of which is, of course, used for shaving brushes and children's tooth-brushes. The hide has no commercial value except for splitting up and making into glue.

Two species of badger were at one time thought to exist in the British Isles—dog badgers and hog

badgers—as the Nature students of the day were pleased to designate them. The former was regarded as rather a villainous character, which fed on lambs, chickens, fawns, and carrion. The hog badger, however, was a harmless feeder, quiet and retiring in habits, subsisting on roots and green stuff, and distinct in the respect that it possessed cloven hoofs! Many of those erstwhile authorities could not have been very close observers, as they were content to follow each other decade after decade into the same obvious blunders, when quite a small amount of field observation would have set them right. By a process of exaggeration they commonly arrived at two extremes, whereupon they simplified matters by creating a new genus.

It is perhaps only natural that a beast about whose ways so little was known should possess the power of impressing the minds of country folk as a mysterious character, and though the badger enters not into our songs and fables, a good many superstitions have been attached to it from time to time. Fairfax Blakeborough, in his excellent book, "The Life and Habits of the Badger," quotes from the work of Mr. Richard Blakeborough, his father: "From the MS. in my possession, compiled by David Naitby a century or more ago master of the Bedale Grammar School,

and written *circa* 1800, the following lore is noted—

“ Should one hear a badger call,  
And then an ullot (owl) cry,  
Make thy peace with God, good soul,  
For shortly thou shalt die.

“ The same compiler copied the following from the flyleaf, so he informed us, of Mistress Braithwaite’s well-thumbed copy of the Holy Writ—

“ Should a badger cross the path  
Which thou hast taken, then  
Good luck is thine, so it be said,  
Beyond the luck of men.

“ But if it cross in front of thee,  
Beyond where thou shalt tread,  
And if by chance doth turn the mould,  
Thou art numbered with the dead.”

It may be that the animal’s burrowing habits led to an association with grave digging. The same writer adds that “ a tuft of hair gotten from the head of a full-grown Brock is powerful to ward off all manner of witchcraft ; these must be worn in a little bag made of cat-skin—a black cat—and tied about the neck when the moon be not more than seven days old, and under that aspect, when the planet Jupiter be mid-heaven at midnight.”

It was indeed firmly believed at one time that to



hear a badger “cry,” and then immediately succeeding an owl shriek, was a certain indication to the listener of sudden death, but exactly what was meant by the “crying” of a badger it is difficult to make out. Personally, I have never heard a badger cry, though I have watched them night after night. I have heard them grunting, however, their grunts interspersed by the hooting and shrieking of owls, yet I live on.

### Baiting and Abuse

So much has already been written upon the indignities and cruelties to which the badger has been subjected from earliest times that I do not intend to devote too much space to this chapter of his unfortunate history. In the past, baiting has been the price of his existence. He has been, and is to-day, the most abused and misunderstood of British wild beasts, and I quote the following from Nicholas Cox as a 16th century method of obtaining sport from fox or badger. It might be added that until comparatively recently it was customary to break off the fangs of the badger before baiting him with terriers. Thus Nicholas Cox : “Cut away the nether jaw, but meddle not with the other, leaving the other to show the fury of the beast, although it can do no harm therewith. Then dig an earth in some convenient place,

cover the hole with boards and turf, putting the fox or badger first therein, and after put in your terriers, both young and old."

Apparently the more terriers the merrier, but it was evidently not usual for the terriers to kill the mutilated badger, for, proceeding, Mr. Cox recommends removing him with the pincers and killing him before the dogs, finally allowing them to worry the carcass. Cox, however, was a humanitarian in his day, for he adds: "Instead of cutting away the jaw it may be every whit as well to break away all the teeth," etc.

It is almost inconceivable that an animal, after being mutilated in so horrible a manner, would yet turn to fight, and cutting away the lower jaw of the badger must have been a specially complicated operation.

An amusing anecdote is told in the locality of Hutton-le-Hole concerning a badger drawing test which took place some years ago, and which, as usual, smelt of beer and pigsties. The badger was in the ordinary type of rectangle wooden box, and the owner of it offered bets of two to one that no dog present could get it out. With becoming bashfulness a ruddy-faced farm labourer, the owner of a long-bodied, long-haired sheep dog whelp stepped up and

accepted the bet. It goes without saying that the badger was not new to the game, and that his owner's confidence was the result of many similar meetings.

The ground was cleared, and the farm labourer introduced his cur to the mouth of the hole, " ticing " him on with befitting sounds. The cur was not interested, so the man got hold of him and shoved him down the hole, tail first. A howl from the dog signified that the badger had obtained a good grip, whereupon the youth let go, and the dog shot out of the artificial earth with the badger still fast to his hind-quarters ! So the youth won his bet.

It may be added that rather than dispute the point a much harassed badger will allow himself to be drawn without much argument.

To anyone conversant with the habits and history of this beast, he stands out as rather a pathetic figure ; but, as already stated, little is to be gained by dwelling upon this unhappy phase of his life. The badger is a friendly and lovable beast. That he is not usually pictured as such is because he is most generally seen under unhappy conditions—perhaps as a cornered and terrified victim, filled with suspicion at his surroundings, and dreading attack. Fortunately, the badger never realises that his case is hopeless. I have known a starving and broken-hearted beast, after

days of captivity and misery, to fight as gamely for its life as when first taken from its home, and so long as a badger lives, its tenacity never wavers no matter how dark the prospects.

The following is typical of the kind of treatment badgers have received at the hands of village "sportsmen" for centuries past. A keeper tracked down a pair of adult badgers and their three cubs when the family moved quarters, and took up their abode on a sandy hillside, in the month of April. The dam and three cubs were killed, but the dog was tailed, and dropped into a bag. Some difficulty in bagging him was caused by one of the terriers leaping when the badger was drawn from the earth, fixing itself to the captive's throat, and inflicting a very sore wound ere it could be removed. Next the badger was placed in a barrel, just large enough for it to lie down in, curled up, and here the creature was kept for a matter of three weeks. During that time it drank a little water, but ate nothing, owing to the fact that it was constantly harassed and worried by its captors. It was kept in the stables at the back of a country inn, and several callers per day would ask to see the badger. The heavy flag was then removed from the barrel, and a hooked stick, kept handy for the purpose, was used to grasp the animal's



"THE TOILET." A BADGER LICKING ITS PAWS.

*Photo by F. Pitt, Bridgnorth.*





neck—still sore from the encounter with the terrier—in order to raise its head. Every time this happened the animal put up a most stubborn resistance, guarding its throat from the crook of the stick as best it could.

Almost every evening Brock was turned into a loose box, and terriers were tried at him.<sup>1</sup> He would amble round the box, placing his forefeet on the walls and looking upwards in search of a possible way of escape. When the terrier or terriers were shown in he would back into a corner and lie there, his nose hidden between his forepaws. So far as I know, none of the dogs introduced actually tried conclusions with him.

At the end of three weeks of this kind of thing I was invited to introduce a specially game terrier of my own, which knew a good deal about hill foxes, but was new to badgers—except those she had stumbled across in the cairns of Perthshire. I refused, naturally, and next morning the badger was found dead in his box—a mere heap of skin and bone. This incident—typical I say of the kind of treatment Brock receives and has always received when he falls into the keeping of a certain class of gamekeeper, hand in glove with the local publican—occurred in North Yorkshire

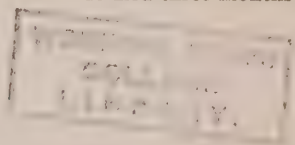
<sup>1</sup> Drawing the badger was rendered illegal by Act of Parliament in 1850, but there is no law to forbid the trying of terriers on a captive badger. This is commonly done.—H.M.B.

at no great distance from Whitby during the year 1921.

### Caged Specimens

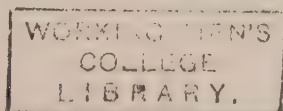
A Gamekeeper in the Kirbymoorside locality recently came across a sow badger accompanied by four cubs nosing about a heather-grown bank in broad daylight, and the man describes with some pride how he succeeded in kicking the cubs to death before the mother could lead them out of the way. In the same locality I purchased a dog badger which a man was keeping for the sake of trying terriers. At the moment of writing the animal is in the Regent's Park collection,<sup>1</sup> and immediately on its arrival in London it distinguished itself by bending several bars in its cage and finally squeezing out. For four or five days it remained at large, sighted once or twice by the police and chased once round Dorset Square by a taxicab. Finally the animal sought out the licensed premises of the "Yorkshire Stingo"—"must have been like a breath from home," remarked *The Daily Mail*—where it was betrayed by the yowling of a besieging band of cats. A contingent from the Zoo armed with a Ford car and a monkey net, aided by several police equipped with electric flashlamps,

<sup>1</sup> It died three months later.



finally rounded up the truant.

This badger, while in my keeping, all but escaped one night by tearing a hole clean through an ancient stone wall, eighteen inches in thickness, built of boulders and mortar. He was only detained by two huge foundation stones which one could not have removed with a horse and chains. According to my experience, badgers taken from the wild, especially after a hard fight, do not try to escape with any determination for three or four nights. On the fourth night they probably begin to take the food offered them, and the succeeding night one needs to look out. Their strength is enormous, and, like the wolverine, the badger seems to possess an instinctive knowledge as to the weakest corner. One I kept stripped an iron bound door of its binding in a single night ; but the strongest badger can be kept safely in comparatively weak quarters so long as there is no corner at which he can get to work with his teeth and claws. If escape is utterly and completely impossible, the animal seems to know, and will not try to escape, but once he starts on a way out he will accomplish absolute wonders in a surprisingly short time. I have known a badger to achieve in a single night a feat of excavation which would have taxed the strength of a strong man armed with pick and shovel.



## CHAPTER III

### WEIGHT

VOGT says that the Siberian and Prussian badgers attain a length of 2 ft. 6 inches and a weight of 55 lbs. We may be pardoned, however, for setting this down as guesswork, and I doubt very much whether the average badger, even in Siberia, attains a weight exceeding 35 lbs.

Adult lowland badgers vary in weight between 18 lbs. and 40 lbs. An eighteen pound bitch is a small one, a 40 lb. dog is, in the low country, more often heard of than seen. I consider a 30 lb. dog badger a good beast. Most of them range between 25 and 27 lbs., and an animal of this weight is very well able to take care of himself.

An adult badger scaling 26 lbs. in, say April, should tip the beam at 30 lbs. or over by the end of summer.

### Mountain Specimens

Unhappily, I have no figures bearing on the weights of Highland badgers, that is those which belong, as

for centuries past, to the realms of the ptarmigan. I can say with certainty, however, that these animals grow to a very much greater size than those with which we are more familiar. A dog badger, killed in the deer forest of Atholl, was considered by the keeper who showed it to me to be but a medium one. It weighed 32 lbs.

Every Highland keeper I have met who is familiar with this little-known race of the mountain-tops is emphatic in his decision that the mountain badgers attain much greater weights than those of the lowlands, and in view of the peril they constitute to the terriers sent into the cairns after the foxes there is every reason to think that they are a more formidable tribe. Of course a badger among rocks is always dangerous, but in Yorkshire or Hampshire it is very rarely that a terrier is killed by the badgers. In the Highlands, on the other hand, a terrier which is too keen on badgers is almost certain to be killed, or so badly bitten that it amounts to the same thing, probably early in his career.

One keeper I know in Perthshire is able to judge the weight of a fox to within a few ounces immediately he lifts it. His knowledge of badgers is confined to the Highland sort, and I asked him whether he would consider a 35 lb. badger a big one. He replied :



"No, I have killed them much heavier. Probably between 45 and 50 lbs."

"But," I replied, "those are almost unheard-of weights in badger country."

He smiled wisely. "I know," he answered. "My brother, who is keeping in Cumberland, tells me that what they consider a big badger we should consider a small one."

All the evidence I have, then, though most of it is not indisputable, seems to indicate the superior size of the mountain badger; and it is, indeed, a curious fact that the animals which choose the leanest, roughest lands invariably outstrip in point of stature those of their kindred of gentler climes. This is probably because the law of the survival of the fittest applies more strongly in the rougher regions. Normally, only the fit live to breed their kind, but under the extreme conditions only the fittest of the fit survive. For instance, the wolves and moose of Alaska, where the conditions of life are all but impossible owing to the climate and the leanness of the land, attain a very much greater size than those of the comparatively sheltered plains and forests to the south.

Returning to the moose, I believe the record moose head for New Brunswick has a span of about 68 inches, whereas the record head for Alaska, dis-

played in the Columbian Museum, measures 80 inches.

With red deer in Scotland this does not apply ; outlying woodland deer attain a much greater size than those of the bleak forests.

The mountain badger is a great wanderer compared with his long valley cousin. Night finds him where food happens to be most plentiful, perhaps some miles from the point at which he spent the day. He feeds till the light comes, then he creeps into the nearest cairn.

Their cairns are everywhere. Anywhere that a mountain fox will den up, there a mountain badger is likely to be. Some little time ago I was taken to task in a friendly spirit by a reviewer in *The Scottish Field* for stating that on many ranges badgers are more numerous than foxes, and by inferring that, if a census were obtainable, the badger, which is thought to be a rare animal in the Highlands, might be found closely to rival the fox in numbers. My critic stated that since the war as many as seventy foxes have been killed on one estate in Argyllshire in a season, and it is a moot question whether there are as many badgers in all Scotland. Let me say, however, that I have repeatedly worked the cairns all day and found never a fox, whereas a badger was at home in practically every cairn at which the terriers were entered. More-

## THE BADGER

over, on many high ranges one finds the tracks of four or five badgers in the snows of early spring for every fox track, despite the fact that the fox covers far more ground. It is, however, impossible to argue on a general basis; on some ranges badgers are rare,



*Tracks of badger, showing how the hind foot impression overlaps that of the forefoot*

whereas the fox population has run riot, but I am justified in stating from my own experience in Perthshire, Rosshire, and Inverness, that in most of the really remote ranges the badger population is far greater than most people think. They do not adver-

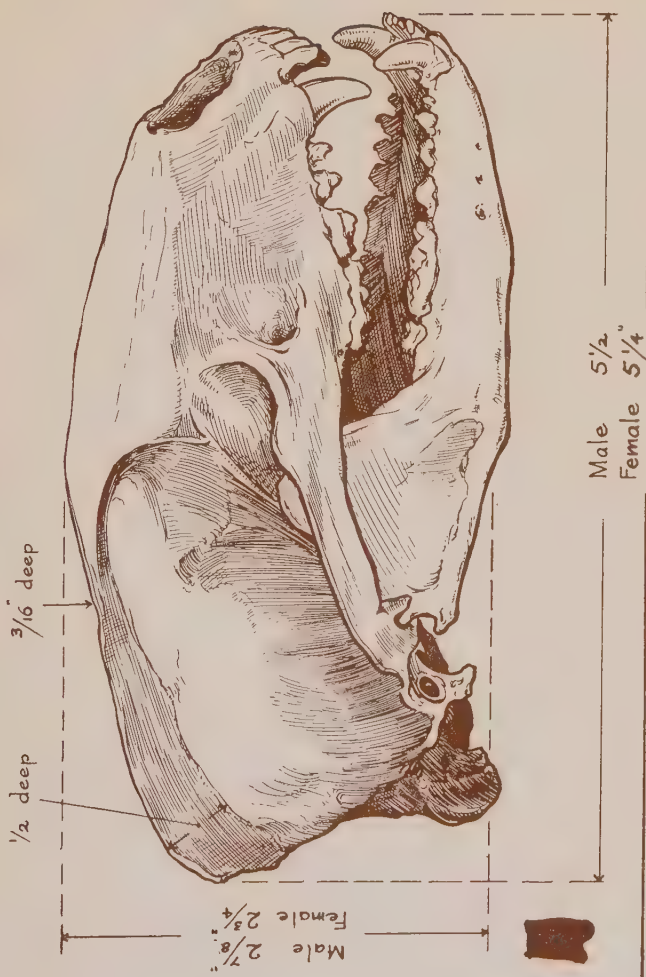
tise themselves, as do the foxes, and only by seeing their numerous tracks in the snows of early spring, or by working the cairns with terriers, can one form the least idea as to their numbers. Moreover, it generally means a long journey and a hard climb ere one reaches the outside edge of badger country, so that many students of natural history do not come across them at all.

The mountain badger is not so great a digger as is the lowland badger. One seldom finds signs of their activities in this way, and I have never known one to dig away from the terriers. Usually their underground galleries and runways are so immense that even were three or four terriers dispatched the badger could move about without coming in contact with them, and listening at the cairn mouth one can hear old Brock bumping about and grunting as he moves from point to point, the yap of the terriers seeming faint and far. Several cairns I know are of such immense size that a man can enter some yards, and on one occasion I had crept into one as far as I could in order to listen for the dog. I was firmly wedged in the pitch darkness, and at first could hear nothing at all, but all at once I found old Brock only a few feet away. Evidently he came right up to me, as I received a stinging blast of gravel in the face, but a moment

later I heard both terrier and badger backing off into the tunnel. Of course it is impossible to dig Brock out amidst such surroundings, but he is fairly easily trapped in the corries. Only a few of the keepers, however, have any quarrel at all with him, the more enlightened of them leaving him in undisputed possession of his strongholds.

The food of the mountain badger on the more barren ranges is somewhat of a mystery. Doubtless mice exist there, but one seldom sees signs of the badgers having been active in digging them out. They visit the landslides in the spring for the purpose of eating the roots which have been torn up, and doubtless they depend chiefly the year round on the roots of mountain plants.

However numerous the badgers may be, one seldom sees more than a passing sign of them in summer. That they travel great distances in the early spring I know, as I have tracked them for miles across the snow. But the moving motive seems to be sexual, as a badger leaving his cairn at this season will travel straight across the height of land and over to the opposite slopes, a matter of four or five miles, without stopping to root for food or even diverting from his line of travel. Indeed, he does not seem to be hungry, and the badgers I have tracked at this season have



SKULL FORMATION, AND DENTITION, OF A FEMALE BADGER.





always been going straight there or coming straight back, rather than rummaging about in search of food. Later in the season, when the snow begins to go, it is no longer possible to follow their movements in a way that can prove anything. Theirs is a bleak and cheerless land, which does not assist a too intimate study of their ways, the weather being so uncertain and the badger population so scattered, that watching for them at night-time is out of the question. I feel convinced, however, that they never travel into the valleys in search of food. They belong essentially to the heights, which is very strange in the case of a beast which so much loves warmth and abundance. Doubtless these mountaineers belong to a very ancient strain, which have found sanctuary in the uppermost cairns since time immemorial, so that they have become a race apart, and well able to hold their own amidst their barren habitat. In Glenlochay we found the remains of a pheasant left by a fox eleven miles from the nearest pheasant country, so that the fox had carried it at least eleven miles and possibly fourteen or fifteen. Even the little Shire foxes travel great distances for their food, and the husky mountain fox is a notorious traveller, but the Brock of the heights looks to pheasant country for nothing save his foes. Of the latter they have none but man and his dogs ;

one cairn I knew to contain young was at the foot of some crags where an eagle had her eyrie, and here young eagles and young badgers have been reared for ages past within gunshot of each other.

### Colouring

It is remarkable that creatures of the night are so often "conspicuous" in that they upset our usual theories as regards protective colouring. Could anything be more conspicuous than black and white, be it daylight or dark?—but the racoon goes one further than the badger in the possession of a ringed tail, which proclaims to all and sundry that "that ringed obstacle sticking over the edge of the branch, while its owner lies flattened and invisible on the bark above, is assuredly the tail of a coon!" When Nature endows the coon with so highly developed a sense in the art of "playing possum," why does she offset her initial intentions by providing him with a tail which catches the eye like a draughtboard, and which so often overhangs the branch on which he is crouching?

A well-known authority on the badger, whose admitted error in his early work was that he was apt to scoff at scientists, asks why the fox is adorned with a coat of red while the badger, whose habits

and habitat above ground are similar, is so differently coloured ? Surely, if there were any logic in Nature's colour schemes, these two animals would be coloured similarly or according to the same lines of reasoning ? But our critic lost sight of two important facts concerning the fox, first that this animal is not strictly nocturnal, and in regions where undisturbed by man is as much diurnal as nocturnal—that is, the fox has become nocturnal in this country simply by force or circumstance ; and second, a popular method of avoiding detection adopted by the fox is that of lying curled up among the leaves, very often partially buried, peering through the dense hair of his tail, which serves to hide the merry twinkle in his eyes. As regards protective colouring, the fox might be more aptly compared with the pheasant, and both are of the leaf-bank hue. Reynard is not truly an earth dweller.

The badger is the most strictly nocturnal of all our wild animals, among which the hedgehog probably ranks next, but it might well be asked whether his colouring has anything to do with this. Possibly it has, for though in all parts of the world more nocturnal than diurnal, the badgers of Texas, for example, are a good deal more diurnal than those of this country, and similarly the badgers of the remote Highlands

## THE BADGER

are about in daytime more than those of Hampshire or the Whitby country. The fact remains, however, that the badger is essentially a night feeder; he reaps his richest harvest when the night insects are abroad in earth and air, and to the night he rightly belongs.

As to whether he is conspicuous depends upon his surroundings rather than upon himself. Not long ago I was watching a family which had their stronghold in a deep, sandy-banked washout. The night was fairly light when first they appeared, but while I was watching them it gradually became darker and darker, till even the white stones at the glen foot were hardly visible. The badgers, however, could be clearly seen the whole of the time. From my hiding I looked straight in to the mouth of one of the larger holes, and one could see the white markings of Brock as he approached the mouth of the burrow from below. Immediately he was outside one saw his dark markings against the sand; had he been any colour—bright scarlet, yellow, salmon pink—he would have been less visible than in his black and white livery. Judging from this experience I would have said that the badger is just about as badly coloured from a protective point of view as any creature alive.

It is, however, always unsafe to dogmatise from a

single observation, or even from a series of observations taking place in the same locality. Some years ago I discovered a colony of badgers living among some isolated and extensive ruins in the West Riding. Here they had a most remarkable stronghold, and their presence was entirely unknown to the inhabitants of the locality. Several nights I took up a hiding among the ruins, and I saw a good deal of the badgers—that is, so far as it was possible to see them. For the most part the nights were brilliantly moonlight, and in this case the background consisted of a jigsaw of light and shadow—the moonlight falling upon the disordered masonry, intercepted by the pitch-black crevices and crannies. Beyond that was the greensward, dotted with trailing brambles and with clumps of nettles here and there.

Amidst these surroundings the badgers possessed the choicest of gifts in the way of camouflage. Generally one could see only a suggestion of movement, which was difficult to follow, but the outline of the animal was not discernible. On one occasion only one of them was abroad. I could hear him grunting and sniffing as he moved from point to point, but I could not follow his movements with any degree of certainty, and after straining one's eyes for some time under such conditions one can see badgers everywhere.

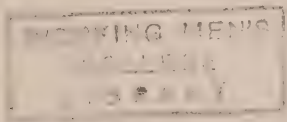


The whole air becomes full of them. Finally the creature came over and began to sharpen his claws on the wall directly below my hiding. I could hear him at it, but stare as I would there was no picking him out ; though he must have been clearly within my field of vision and only a few feet away.

It is impossible to cater for individual circumstances in handling the affairs of an army, and as a rule Nature adopts the best general plans for the welfare of her children. The badger is a child of the moonlight and shadow, and he is marked accordingly. We may criticise Nature's judgment at times, but if we ourselves had the power to settle the question at issue, we should soon find that we had made a far worse blunder.

I have noticed that in many localities badgers become yellow with old age, an order which is commented upon by many observers. I am not convinced, however, that the nature of the soil in which they live has nothing to do with this. An old dog badger we killed in a Rosshire valley was as white as any Whitby youngster. His surroundings were of peat, sand, and boulders, which contained no pigment which could result in the yellow cast. Similarly I have noticed several old badgers which have lived their whole lives in captivity, with a concrete floor on which to

walk and a clean bed of straw on which to sleep, which had no yellow tint. Usually, however, the badger's earth burrows lead through a strata of sandy clay, and in these circumstances even the young ones, when first taken from the earth, are quite yellow, especially if they have been fighting with the terriers. A few days in a clean bed removes the yellow tint, though as the animal grows older this tint becomes permanent, as though the colouring matter has penetrated to the innermost recesses of his being. Skunks and even ermine are apt to become very yellow with old age, and one cannot, in the case of the ermine at any rate, attribute the colouring to the nature of the earth, for the transient ermine burrows more in the snow than in the soil. The earth, indeed, may be frost bound under the snow, and the snow would naturally tend to clean him. All I can say, then, is that yellowness of coat is no certain indication of senility ; an old badger may be yellow, but a yellow badger is not necessarily old.



## CHAPTER IV

### DISPOSITION

THE badger is a highly sensitive and nervous beast, and apart from all question of physical injury, the cruelty of keeping a live badger under the conditions described in Chapter II can only be realised by those who know the animal in captivity. My experience is that when given every possible consideration, it takes days for a badger to forget the living nightmare he has undergone during his encounter with the terrier. I have known one, after a fortnight of rest and good feeding, to lose much of his distrust of his captors, and Brock under such circumstances will look you straight in the face as will few wild creatures, and in a way which wins your heart. But at this juncture I have known the poor beast to be set back for several days, taking again to hiding his face and burying his nose between his forepaws whenever visited, simply because once, when the door was opened, he heard the yapping of a dog, roughly rebuked by a man's voice! What, then, must be the

feelings of a captive badger persistently harassed by rough men and treated to the company of their terriers ?

Anent this point Mr. W. Clapham wrote Sir Alfred Pease concerning a captive badger.<sup>1</sup> " He got fairly tame, and would take a rat out of my hand and eat it at once. I most foolishly tried a young dog at him and he never settled afterwards, ultimately getting away in the night-time."

Thus it takes days of kindly treatment and quietude to restore the peace of mind of a wild badger taken from the earth. They fear women less than men, and a wild badger in captivity will raise his head and look curiously into a woman's face when the sound of a man's voice still causes him to hide and " sulk."

It is impossible to come to know the disposition of the badger solely by the study of the wild specimens. One must also know the animal in captivity, when familiarity with his ways casts much light upon his natural habits. First of all it brings forcibly home the fact that he is anything but of an aggressive nature. In saying all this I am not pleading Brock's case ; I am only writing of him as I know him. And I have known numbers in captivity—tended them daily, " tamed " them, boxed them up for shipment

<sup>1</sup> " The Life and Habits of the Badger " (Fairfax Blakeborough).

to other quarters, and I have never known a badger to show the least signs of evil temper or aggression. I remember trying to box up a 27 lb. dog which had been absent from his wild surroundings only a week. He was in a stone pigsty, which was all corners, and which I could only enter on all fours. Put the box over him I could not, as so great was his strength that he thrust it aside or wriggled round one end every time I tried. Twice he charged full into my arms, but though prodded and levered with a spade and a club he made no attempt to bite these weapons, as any other wild animal I can think of would certainly have done. Finally I put on a pair of hedge cutting gloves, grasped him by the neck, dropped him in and thrust down the lid. He did not try to bite me, and was glad enough to nestle down in his new bed of straw.

At the same time I would not recommend such liberties as a general rule. A badger does not bite till he has to, but when he does bite it is no laughing matter. Truly is it said that he does not leave go till his teeth meet. A friend of mine was in the act of tailing a badger when one of the dogs got hold of it. Unable to sustain the full weight of both at arm's length, my friend was compelled to lower the badger to earth. In the general scuffle that followed Brock

got hold momentarily of two of the man's forefingers, which were completely crippled. The jaws of a badger have been known completely to sever a man's hand from his wrist, but one learns just how far it is safe to go, and a quiet masterful manner is the best assurance against being bitten. Even a wild badger will not snap at a man so readily as it will snap at a terrier, and will not bite at all, indeed, till forced to it in self-defence.

In the spring of 1922 I met Captain Scott Hopkins, a well-known North Riding sportsman, walking about the streets of Kirbymoorside carrying in his arms a half grown badger cub he had caught the previous day. During our conversation he remarked that it is believed in some quarters that Brock has no breastbone, whereupon we submitted the cub to all manner of indignities in order to settle the point. During these operations the little creature showed no signs of resentment, but seemed, rather, to derive a soothing effect from the pressure of our fingers.

Mr. Rutter of the same town has reared numbers of badger cubs, and states that they make very attractive pets. He has handled them repeatedly even when full grown, and has known but one real biter. This exception would bite even when a small cub.

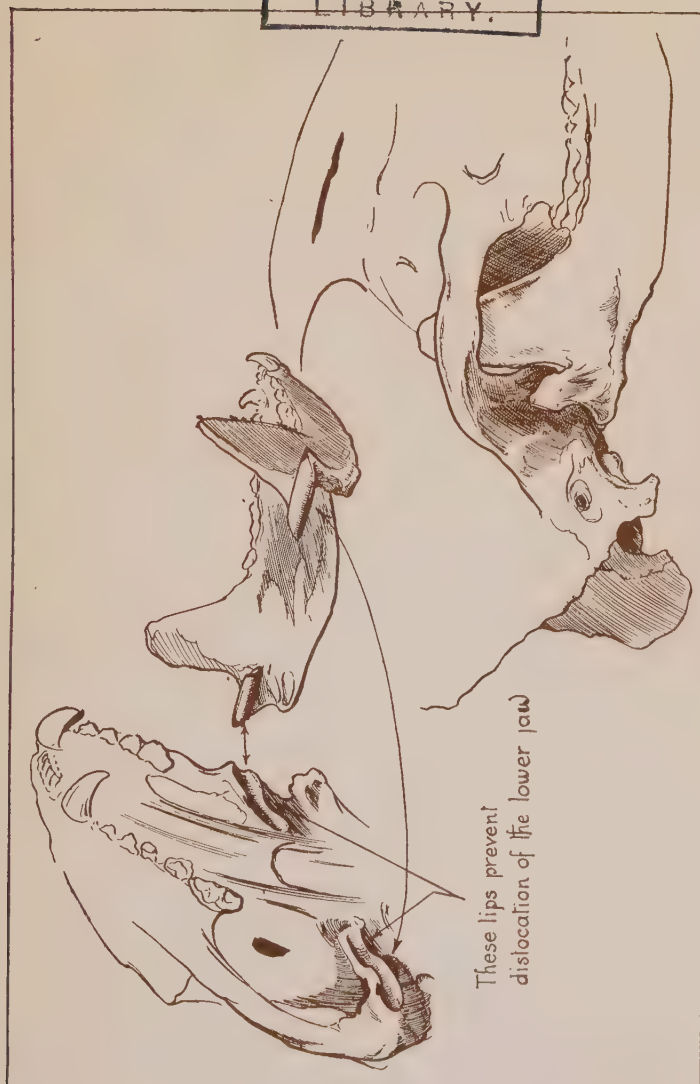
But a badger reared in captivity, and one taken



from the wild after having gained maturity, are two very different propositions. I have never known one of the latter to become so fearless of man that it would have been safe to handle it. This, however, does not apply to the African ratel, which can be tamed and handled in quite a few days ; but the ratel has not the long bill of bitter memories which have made Brock what he is to-day.

Badgers used for trying terriers are not uncommonly taken in steel traps, so that the wretched animal sets out on his new life of adventure sorely maimed in one paw. Such a condition of things is sufficient to rob him for all times of any sense of trust in mankind.

Though no longer regarded as a respectable pastime, it must not be thought for one moment that the practice of baiting captive badgers has ceased to exist, for it is still regarded as quite a praiseworthy sport. The Highland keepers are generally good naturalists and men of superior stamp, and, as already stated, have no quarrel with Brock, and the same applies to the keepers of the Hampshire forests, who probably know more about badgers than those interested in game preservation elsewhere in the country. I think a great deal depends upon the influence of the local M.F.H. ; his example is followed, and some monstrous



These lips prevent  
dislocation of the lower jaw

JAW-LOCKING DEVICE OF THE BADGER.



cruelties towards Brock have occurred upon the hunting field. If, on the other hand, the presence of Brock be favoured, or tolerated with indifference, in the hunting circle of the locality, one seldom hears of cruelty on the part of villagers or gamekeepers. At all events, land proprietors and shooting tenants have the matter in their own hands.

The badger is quite commonly regarded as a solitary creature, and we have not far to search for the reason of this error. Over certain small areas the animals are plentiful, but between these areas the badger population consists of travelling individuals, generally males.

Under such circumstances even a mated couple or a whole family may not den up together, as they have no established warrens; they are found and killed singly, and since these conditions prevail over the greater part of the country, they have given rise to the foregoing conclusions.

In truth the badger is anything but of a solitary disposition, as the term applies, for example, to the hare. He is probably the most intelligently sociable of all wild beasts of this land, and his home life stands out as most nearly approaching ideal.

As a general rule solitary badgers are such from force of circumstances, and generally sorrowful cir-

cumstances, rather than from choice. It is impossible to dogmatise as concerns the ways of wild nature ; we can set down certain rules as a safe basis from which to work, but there are invariably exceptions. So there may be exceptional badgers which become solitary on account of an unfortunate disposition which renders it impossible for any lady to live with them, for invariably these lonely prowlers are old dog badgers.

I repeat, however, that no badger is solitary by choice. The nomadic old dog who travels far and is to be found in regions where his kind are rare, is not travelling for the fun of the thing, but with the first reason in life as his moving motive. He left home not because he wanted to be alone, but because he was lonely. He has searched far and is still searching, and he is the badger which, more than any other, leaves the sign of his passing on the rough bark of the corner pine, and on the jagged rock at the glen foot where four runways meet. He never misses an opportunity of leaving the record of his presence ; in other words he blatantly advertises for a wife everywhere he goes by scraping the bark of trees and logs with his claws, and by rubbing his neck on any protruding shelf or rail end.

I have repeatedly seen these calling places of the

badger kind. One old dog which wandered about for some time in the forests near Bolton Abbey, had several calling places, about which he evidently spent some time, since all round one saw where he had dug shallow prospect shafts, evidently to while away the lonely hours, rather than in search of food. One of his calling places was at the edge of the open moor, and on the ground lay a large square wall-stone, weighing perhaps half a hundredweight. He had rubbed himself round and round this, wearing a distinct circle where his claws dug up the peaty earth as he brought pressure to bear between his flanks and the stone. This badger was later run to earth among some rocks, where it killed two terriers sent in for it by the keeper. After that it disappeared from the locality.

Solitary badgers were regularly putting in an appearance in the valley of the Dibb, near Burnsall village, during the years that I lived in that charming locality. One would stay for a few days then disappear, whereupon months, probably, would elapse ere we saw signs of the next. These passing voyagers came from great distances, crossing the height of land between the Nidd and the Wharfe, and thence on into the extensive forests which clothe the slopes towards Barden Priory and Bolton Abbey, where annually one or two were killed. Some of them were very



active, and I have known a travelling badger to dig a veritable warren in a single night. This often leads to disappointment for the would-be badger student. He imagines that a whole colony of badgers have taken up an abode in his locality, and evening after evening he lies in hiding in the hope of obtaining some insight into their ways. Meantime the wanderer has moved on, and in due course the enthusiasm of the watcher drifts into more promising fields. At the same time, the pioneer badger which goes forth and digs a warren has performed an inestimable service to his kind. Once an adequate warren is started, it is never completed. Other badgers come, and each one enlarges and improves, till in due course it becomes a badger stronghold. Where there are no deep burrows badgers cannot establish themselves, unless, of course, natural sanctuary exists in the way of rocky retreats. Very often badgers will not establish themselves even in localities where rocky strongholds are everywhere. Being sociable animals, they prefer the "hand made" retreat, and once this exists there is every chance of their settling and becoming more numerous. But for their invincible strongholds badgers could not exist in our island.

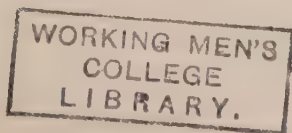
As a rule the prospect shafts of the old nomadic dog are shallow. He spends the day in rabbit burrows,

among the rocks, or curled up in the dense bracken beds. I remember at dusk one evening my terrier turning one out of a bracken bed. He made off down hill in a surprising dash, and I heard him reach the burn at the glen foot with a terrific splash. The terrier was hot on his heels, and there was a good deal of scuffling and excitement, but when I came up the terrier (a young bitch) was running wildly in circles from rabbit burrow to burrow, having, apparently, completely lost track of the badger. I could not help feeling at the time that the loss was rather a matter of convenience on her part.

As regards the badger and curious companionship, Seton gives some interesting facts on this subject as regards the American species. He says, in his "Life-Histories of Northern Animals," "The first cases were friendships with coyotes, and were recorded by A. H. Hawkins, the surveyor.

"During the progress of my survey in southern Alberta I noticed on two occasions a badger and a coyote travelling in company. The same thing was observed and reported by the men who did my mounding on three different occasions, all of which were in different localities.

"The men reported having seen the animals travelling in company in Township 1, Range 13,



West of 4th Principal Meridian. The first time that I saw them together was in Tp. 6, R. 17, and the second time in Tp. 7, R. 17, W. 4th. This last time I had the best view. Seated one day eating our noon lunch, I noticed two animals coming towards us and drew the attention of my men to the fact. We remained perfectly quiet, so that they came within 20 to 30 feet of us before seeing that we were so near. The coyote travelled ahead, and the badger followed along as fast as he could, right at the heels of the coyote.

“‘I could see no reason nor could I explain it in any way satisfactory to myself, and, although I asked several people in the West about it, the occurrence is still a mystery to me.’

“Some similar cases have been reported to me by G. A. Rimington, of Penrith, England. Several times, near Calgary, in 1907, he saw a badger and a coyote associated and travelling together. In these cases it seemed to be a partnership affair, which was probably involuntary on the part of the badger. No doubt the coyote knew very well that the badger would dig out ground-squirrels, some of which would bolt and thus give the coyote a chance to share in the spoils.

“In exactly the same way the badger is followed by hawks, etc., in California, as graphically described

by Mary Austin in 'The Land of Little Rain.'

"But the most remarkable case of all is a friendship between a Manitoba badger and a lost boy. This was related to me by George Fraser, a native of Manitoba, and corroborated by his mother, Mrs. Fraser, of Kildonan, and Archbishop Matheson.

"In 1871, a little seven-year-old boy, named Harry Service, wandering from his father's house at Bird's Hill, near Winnipeg, was lost for two weeks. When found he was living in a den with a badger. His clothes were torn so that he was nearly naked, and his face was all scratched. He told his parents that he had taken shelter in the hole during a rain-storm, and that the badger came later and scratched his face. At first they fought, but the child was plucky and would not give up the hole. Later the badger brought some food and, after another quarrel, allowed the child to eat some of it. In the days that followed the badger brought him food several times. The beast always entered the den by one of the entrances not used by the child.

"When found they were on terms of friendship, and the child cried bitterly when taken from his savage friend. The boy's story, however, was not clear. He said at one time that he lived on mud. His face, mouth, and tongue were black with mud and

much swollen. Nevertheless his description of the badger was beyond question. He even said it had five toes on one foot and four on the other."

In character the badger is peaceloving and retiring. No creature on earth wants to fight less than he does. His undying aim in life seems to be to avoid disturbances of any kind. He hates a row, and he is never, so far as man can observe him, the aggressor. And, as the beaver stands out as the symbol of industry, so might the badger stand out as the symbol of staunchness. His very cut suggests it.

The long persecution to which the badger has been subjected has proved his salvation. It has produced a beast which can hold out against man, and is to-day in a better position to retain its footing than fifty years ago. It is probable that there are in England now almost twice as many badgers as there were twenty years ago, and the race is in no danger of extermination. In the New Forest and in that area of country enclosed by a triangle having its apices at Thirsk, Saltburn, and Scarborough, there are probably as many badgers as in the rest of England put together. Here they live in colonies, but elsewhere, for the most part, their distribution consists of scattered families. Nevertheless, it would be difficult to name a single county which does not contain at least its badger family.



These animals sometimes exist where none suspect their presence. I have myself seen signs of badgers so near a manufacturing centre that not a blackberry matured on the hedgerows owing to the raids of city children, while discarded tins and rubbish filled every wooded hollow. Amidst such surroundings Brock is more than ever secretive, but well may he find safety, unknown elsewhere, where none suspect his presence, nor search for the signs of his passing.

Even in the heart of badger country, I have had a farmer come to me to describe a strange beast he saw at the day's breaking, for Brock, who has played no part in our songs and fables, is one of the least known beasts of the land. Many regard him merely as a name, and never dream that this same beast may tread the soil that they tread daily, and have his home in the woods which their very windows overlook.

### Playgrounds

Returning to the subject of calling places, it may be taken that every badger family has a favourite rendezvous, whither the family adjourns after feeding time in the darkest hour of the morning. Usually it is near running water of some kind—generally towards the centre of the wood. All about there are the usual shallow, blunt-ended scratchings, which



badgers are so fond of making—some say that beetles fall into them and hide there, to be nosed out when darkness settles! A fallen tree trunk may serve as a back scratcher, and also as a play bench for the young, while on a log or trunk near by the old ones, and sometimes the growing young, exercise their claws.

I have had one or two such playgrounds under observation in the New Forest, and have one under observation in Farndale—the valley of the daffodils—at the time of writing. Whether they are the property of individual families, or the common property of all, it is hard to say, but one cannot help but feel that such a recognised institution plays some important part in the history of the species. Intercommunication in the wild exists only for the purpose of bringing the sexes together, and it is a curious fact that while other members of the family Mustelidæ invariably use their musk glands as a means of communication, there is an entire lack of evidence that the badger, while possessing these glands, ever does do. Other uses for the glands are claimed, but not, so far as I know, the use of intercommunication. Ferrets, martens, and the like, rub their glands on any protruding obstacles, thus leaving their body scent in no unmistakable terms, and in a manner which will outlive several days of sun or drenching rain. Maybe

in the case of the badger the rubbing rock and the scratching post answer the same purpose as the musking places of the lesser weasels.

True sociability, however, consists of an interest in each other outside sexual attractions, and animals which habitually live in pairs are not necessarily sociable. In this respect wild animals may be divided into three classes: (1) those that unite only for the brief period of sexual excitement, such as hares; (2) those which mate for life and which normally live together the season through, though they do not colonise and have no bond of fellowship outside mating or family ties; and (3) those which colonise or live together in communities. The question of marriage does not enter into the matter as regards class 3. Many of them are polygamous, and have no morals to speak of, yet they are truly sociable. The highest of them mate for life, and both parents are interested in the welfare of the children. To these belong the beaver, the badger, the muskrat, and the watervole.

Many would no doubt place the badger in class 2, but I think he rightly belongs to class 3. A badger "sett" is not necessarily the sole property of one family. I have burrows under observation in which at least two, and possibly three families are living,

say nothing of sundry lodgers in the way of rabbits and an occasional fox. So large are many of these warrens that they appear to be let off in flats, and though the different families occupying them may be on merely speaking terms with one another—each family pursuing its own affairs heedless of the rest—there is no doubt that the runways to and from the warrens, like the warrens themselves, are common property, not the property of individuals as are the runways of brown hares.

But a higher sign of true sociability in the badger is this: two dog badgers may regularly be found sharing the same outlying quarters, and living their lives *en garçon*, apparently in perfect concord. No doubt the question of mutual warmth has something to do with this, but at the same time it indicates a love of company and companionship.

Not long ago two large badgers were dug out at Hutton, and both were killed. It was concluded that they were a mated couple, but on the question being raised it was found that they were both dogs. There were no other badgers in the earth, which was a new one and consisted of a single shaft. On another occasion we dug out and bagged an old dog badger. What we really wanted was the bitch, so we went on digging into the small hours when we got her. A

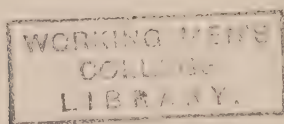
week later "she" also proved to be a dog, and we were fully convinced that there were no other badgers in the earth. On both these occasions the burrow was an outlying one, and the animals concerned were evidently bachelor friends.

In the spring a certain percentage of the dog badger population is moving restlessly from place to place, sleeping more or less where the dawn finds them, which would account for any unfortunate mix up of the kind described, but by autumn most badgers have settled quarters, and both the digs described occurred in the autumn.

### **Inequality of Sexes**

Judging from my own observations it would seem that there is generally a great superfluity of dog badgers—hence the overflow of males into the surrounding country. Every solitary and outlying badger, found in a region which is not badger country, that I can recall, has proved to be a dog. I have often heard a keeper reply to the question, "Are there any badgers on your beat?" by saying, "We occasionally get an old boar." Even where they are most plentiful, three dogs are taken to every bitch, which may, of course, be accounted for by the bitch or bitches walling themselves in with their cubs while

the males do the fighting. At the same time boar badgers are undoubtedly more numerous than sows, and it is quite possible that the females have difficulty in parting with their young, and that a good many die during the process of parturition. This would account for the numerous dog badgers of marriageable age living unmated, as seemingly man's activities would tend to balance nature rather than upset it. At all events, since we take it that more dog badgers than sows are killed or taken by man, there must be subtle circumstances to account for the preponderance.



## CHAPTER V

### FOODS

WE turn now to the foods of the badger, and the question can almost be dismissed in one line. They will eat such fruits and insects as birds eat, such roots and fungi as are not burning to the palate or harmful to the stomach, and fresh meat of any kind. The roots of the wild hyacinth, pig-nuts, truffles, mushrooms of various kinds, insects of any kind, berries when in season, slugs, worms, frogs, new shoots, old boots, anything short of corrugated iron and the solid earth on which they walk. Sometimes they eat a good deal of the latter, but absent-mindedly no doubt.

To say that any wild creature does not eat this, that, or the other, is always to invite contradiction. Individuals are apt to cultivate peculiar tastes, in addition to which there are times of scarcity when any carnivorous bird or beast will divert absolutely from its customary habits, and attack anything it thinks it can hold. So the squirrel egg thief is an



individual sinner, whose bad habit quickly spreads, as bad habits do in the wild as in the world of men and women. So the fox sheep-killer is an individual sinner, as I have proved many times. True that any fox will kill lambs if overwhelming temptation comes his way, but the root of lamb-killing lies either in the scarcity of other foods or in an overstock of foxes, which amounts to the same thing. The fox that kills lambs knows that he is trespassing on sacred territory just as a renegade dog knows—save, perhaps, the really wild foxes of the hills, which regard all that they can find thereon as their true heritage, and man as the trespasser. That foxes know is proved by the fact that the sheep-killer never kills on his own home range, but on the range of another fox.

Since my boyhood the ways of the badger have always interested me deeply. I have never missed an opportunity of studying him, or of asking questions about him from men who should know. My studies have been limited to Northamptonshire, Hampshire, Cumberland, the North and West Ridings, and various parts of the Highlands and Lowlands of Scotland; also I have studied the species a little in the prairie country and in British Columbia. Generally the first thing one hears about a wild beast concerns its harmlessness to man's interests, but I have come across so

little that is detrimental to the character of the badger that I may be justified in claiming that the outstanding sins for which the whole species is so often condemned, are few and far between—so few, indeed, that one may search for them industriously throughout a lifetime and find not a single example.

That Brock has been known to destroy the nests or young of game birds I do not for a moment doubt, but the fact that I have never met a student of the badger's ways who has found a proved instance, nor have I ever known it to happen myself, is surely sufficient proof that the sin is a very occasional one. The experience of one man is never conclusive, but it should stand for a little. I have known a hen pheasant successfully to bring off her brood within immediate proximity of a badger warren, in which young badgers were being reared. They must have known of the whereabouts of the nest, since they gathered bedding from all round it. Similarly, my friend Smith, the keeper of Boldrewood, who has lived in the midst of the New Forest badgers and the New Forest pheasants all his life, has never known a badger to disturb a pheasant's nest. He has found many purloined nests, but his experienced eye proved on every occasion when suspicion might have fallen upon the badger, that the spoiler was a hedge-

hog or an adder or some well-known egg thief.

In the North Riding hunting influence has been entirely destructive to the good name of Brock. He has few friends there, yet the many North Riding keepers with whom I have been acquainted have been compelled, often reluctantly, to admit that they have never come across a proved example of his destructiveness to winged game. In the Highlands it is the same. A few Highland keepers kill badgers when the chance occurs, but they can give no proper reason for their attitude. It is simply because Brock is large, and the possessor of flesh-tearing fangs. If bird catching were habitual in the badger, we should surely find it in the Highlands, where the land is lean, game plentiful and easily caught, and other foods so scarce. Ptarmigan roosting in the drifts would stand no chance of escape from Brock, yet I have followed the tracks of the mountain badger across the snow for many miles, and I have never found anything which suggested the ways of the game hunter.

So, though of course it would be absurd to say that the badger never harms game birds, it is at any rate evident that the offence is so rare that one with every opportunity of watching may live a lifetime without coming across a single example.

Mr. Tom Speedy certainly does not go out of his

way to plead the deliverance of such wild birds and beasts as gamekeepers commonly dub vermin, nor does he draw a veil over the unpleasant sides of their characters, and he places on record instances from his own experience of badgers destroying the nests of game birds.<sup>1</sup> Mr. Speedy has little good to say about the badger, and in view of the fact that he subsequently professes regret at the increasing rarity of the species in Scotland, why does he describe, apparently with some pride of achievement, how he shot two and impaled a third with a paling-stob when one evening by the Tweed he came across a family quietly feeding in a field? Mr. Speedy also describes how he set traps for two badgers he wished to keep alive; one got away with the trap fast to its foot, and perished miserably. Though perhaps the poorest type of sportsman is he who finds pleasure in criticising the methods of another, surely there is one rule common to all—a fair deal, and, when possible, a humane one?

That badgers feed on young rabbits anyone with experience of the animals has probably found out. I have more than once come across their activities in this line, but chiefly in open country, where there was comparatively little timber and the ground was of rocky formation. They seem to trouble less with

<sup>1</sup> "The Natural History of Sport in Scotland."

this kind of hunting where woodland fare of all kinds is at hand.

The method the badger usually adopts of digging young rabbits from the nest or "stop" provides an illustration of the animal's marvellous powers of scent. Having located the shallow hole containing the helpless young, he does not, as a rule, trouble to enlarge the hole, but instead he digs down vertically from a point directly above the young as he digs out roots. I have known a badger simply to enlarge the stop, just as a dog would, but many times I have seen where he has dug down vertically to the young, or at any rate commenced to dig.

Thus we have ample proof that Brock appreciates a rabbit meal, yet scarcely a badger earth is without its rabbit tenants, and often young rabbits and young badgers are bred in the same earth.

The badger has a few good friends, among whom may be counted the Earl of Rosebery, who turned several down on his estate. It is becoming the rule among discriminating sportsmen not to destroy Brock, but to box him up and pack him out to another part of the country when circumstances dictate a lessening of his numbers. The various Badger Clubs have behaved excellently in this way; their existence reduces promiscuous killing, and by preserving any animal



for sporting purposes a great step is taken in the direction of the preservation of the species.

Though actual records are few of badgers killing sitting hens and pheasants by upsetting the coop or forcing the bars apart, reference is made to the animal's destructiveness in this way in almost every work describing its habits. I have come across but one example, and that an exceptional one. At Gilla-moor in the North Riding a badger was caught by the villagers and kept in a box for some days. The only food offered it was stillborn lamb, which, of course, the animal would not touch, and after some days it escaped in a starving condition. It then visited the nearest poultry yard, lifted a coop, killed its legitimate occupant, and having fed went to sleep in the coop, to be caught again next morning.

The fact is that the badger, being a slow-moving beast, takes the foods he can obtain most easily. Where insects, bulbs, berries, and sweet roots are everywhere abundant he confines himself to such fare, but when such foods are scarce he is compelled to go a-foraging.

Mr. Riley Fortune, President of the Yorkshire Naturalists' Association, sends me an amusing account which serves to illustrate prevailing ignorance as concerns the badger, together with the accompanying photograph of a poster. Mr. Fortune writes:



"You will be interested in seeing the enclosed photo of a poster with which the outside of a penny gaff was plastered. The show was in the annual fair at Leyburn (Wensleydale) in 1911. It contained a half-

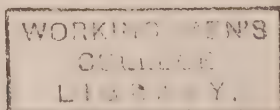
**An Extraordinary CAPTURE**  
**AT STAINTON**  
**NEAR DARLINGTON**  
OF A  
**MONSTER**  
**BADGER**  
Which terrified the District with its  
**DESTRUCTION OF SHEEP & CATTLE**  
and caused so much alarm as to form Parties with Dogs and Guns to search for its capture, in which they succeeded after  
**A DESPERATE FIGHT.**  
**TO BE SEEN HERE**  
**ALIVE.**

grown badger and several guinea pigs. A friend of mine noticed a lot of cod's heads lying about, and asked the lady who ran the show what they were for. 'Oh,' she said, 'soon after the badger was caught, nearly two months ago, a gentleman came into the show and said that badgers

lived on fish, and we have given him nothing else ever since!' The animal looked remarkably well, and the lady was doing a roaring trade.

"This," adds Mr. Fortune, "is one of the ways in which a knowledge of Natural History is spread! The statement on the poster relating to the killing of sheep and cattle hardly agrees with the lady's statement that badgers live on fish!"

A cottager in the New Forest told me that once or twice badgers have visited his garden during the night for the purpose of upsetting the beehives



and stealing the honey. Fowls were kept in the same garden, but the badgers never disturbed them.

The animals are, of course, very fond of the grubs of wasps and hornets, and never miss an opportunity of digging out the nests. They leave an untidy litter, scattering the comb broadcast after breaking it up and pulling out the grubs.

A peasant in Lorraine told me that the badgers regularly come down from the forests during the night in order to root about in the village gardens. They are particularly partial to parsnips, and will play havoc with a bed, digging up all the roots and eating the best of them.

During the war the badgers on that front became quite used to artillery fire, and retained their strongholds right up to the batteries. They were regularly seen by the muleteers carrying provisions and ammunition at night-time. On one occasion in 1917 I was riding a motor cycle and sidecar about three miles from the front at night-time. A poilu was mounted on the carrier of the machine, and another occupied the sidecar. On rounding a bend we were surprised to see a badger in the centre of the road, and observing us it turned and proceeded to jog along a few paces ahead.

The two French soldiers were enormously excited, urging me to run the creature down, and when finally it vanished into the timber their disappointment was immense, for they said that Blaireau is excellent eating. They told me subsequently that badgers live in the trees, and subsist chiefly on small birds. Badger hams are, of course, quite a recognised item of food in many parts of France, Germany, and Italy, and are said to be quite excellent. One writer compares badger meat with bear meat, and the latter may be hard to beat, though owing to the fact that the bear is even more omnifarious than the badger, the quality of the meat depends considerably on what the unfortunate bear has been eating.

Badgers will starve sooner than eat carrion. Mr. Rutter of Kirbymoorside went over to see a pair of young ones which some villagers were keeping, and found the den of the poor creatures in a filthy state, littered with stale meat of all kinds. They had been captive about a week and had eaten nothing. The morning succeeding Mr. Rutter's visit both were found dead in their box. They will, however, eat freshly killed birds, or fresh wholesome meat of any kind, though it is not advisable to give a captive badger too much meat, or he is apt to become rather offensive to the nostrils. Cleanly fed and cleanly

bedded Brock is as scentless as any wild animal I know ; he has a peculiar smell, but not an offensive one, as have most of the musk bearers. The same faint aroma pervades his burrows, and with experience one can tell by one's nose whether or not a sett is in use.

Badgers also kill and devour rats, both house-rats and water-voles, and on the River Wharfe I saw where one had been immensely busy digging up an extensive waterside burrow. He had uprooted the earth over an area of several yards, much as a hog does, and at first I thought it to be the work of an otter or fox, for badgers were rare ; but the nature of the scratchings and the distinct " bar " of a badger's foot provided proof. Among the ruins I found the tails and part of the skins of one or two voles, and I have no doubt that Brock accounted for the whole family, as watervoles are loath to leave their burrow when beset in this way.

Visiting some friends near Sturminster some years ago, I was wakened one night by the harsh squalling of a hedgehog issuing from a small planting adjacent to the house, and concluded that the animal had walked into one of the rabbit traps my host always kept down for the preservation of his garden. On going out next morning, however, we found the empty skin of a hedgehog lying among the leaves, as flatly

as if it had been pegged out, and we decided that the killing was the work of a badger, though I forget now our reasons for coming to that conclusion. Mr. Fairfax Blakeborough remarks that hedgehogs are terrified of badgers, and recounts an experience which seems to indicate that Prickles becomes terrorised on the sight of this deadly foe just as a rabbit does on perceiving a stoat or a weasel.

The badger eats anything and everything barring carrion that the hedgehogs will eat, or maybe there is a sense of hostile rivalry between the two ; but at the same time hedgehogs use extensively the draining gutters bordering the ridings of the New Forest, and which the badgers use so much. It may be, however, that falling into one of these gutters the hedgehog is unable to escape for some time, so that his usage is compulsory.

“Do badgers kill lambs ? ” is a question which is very often asked, and there is no doubt that there are many cases on record of such destructiveness. At the same time one may live one's life in the midst of a sheep-rearing country where badgers are abundant and find not a single example. I have known a merlin hawk to kill an Alpine hare, but to destroy the merlin as a killer of hares would obviously be absurd. Just as absurd is it to persecute the badger because one in

a thousand may be proved guilty of lamb killing.

Only twice in my long intimacy with the badger have I come across two unquestionable instances of lamb killing. A North Wales proprietor informed me that several lambs were killed on his property, and that foxes were thought to be responsible. One night, however, two of the dogs attacked and held something while the shepherd was on his round, and after a terrific struggle, in which the man lent able assistance, the badger, for such it was, was killed. The animal was found to be covered with blood, and a newly killed lamb was discovered at the point from which it had started.

There is, however, no mistaking the work of the badger, as he bites the lamb behind the shoulder as does neither fox nor dog, thus himself furnishing the condemning proof.

At Lavingham a year or two ago one or two lambs were killed by badgers, and James Todd of Hutton tells me that in his boyhood many more lambs were killed than to-day, though probably there were not many more badgers. In spite of numerous such records, however, we may take it that for all the badgers in this country not half a dozen lambs are killed by them per year—no more, indeed, than are killed by such rare creatures as eagles and wild cats!



But perhaps the most fatal entry on the badger's crime sheet is that which has found him guilty of vulpicide, but here again, at the risk of being thought an arcadian rather than a historian, I can only say that I have never known a badger to kill foxes, nor have I ever come across anyone with personal experience of it. Indeed, I would question Brock's guilt, but that such modern authorities as Sir Alfred Pease, Mr. Fairfax Blakeborough, and others are conclusive.

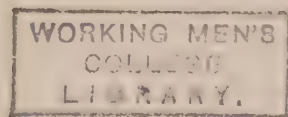
That badgers have been known to kill fox cubs is therefore unquestionable, but certain it is that the good Brock does on behalf of the foxes very much outweighs the very occasional harm done by fox killers. I have known foxes and badgers to live next door to each other and in the same earths. I have questioned men who have studied the fox and the badger side by side all their lives, and the fact that I have never been able to get hold of proof, outside the works of other writers, is surely sufficient evidence that the crime is a very occasional one.

Mr. Blakeborough says : " They are slow and steady feeders, not ' gorgers ' like the fox, who likes to fill his belly at one sitting."

I am afraid, however, that I cannot agree with Mr. Blakeborough in this. Where there is a superabundance of food, the badger probably spends seventy hours

underground for every hour on the earth's surface. They come up for an hour or so, gorge to the absolute limits of repletion, then do not appear above ground again for three or four nights, except to visit the plot of ground laid aside for sanitary purposes. The amount of excrement left in a single night at such times passes all belief, and I take it that Mr. Blakeborough's statement was the result of his intimacy with moorland badgers rather than with those of the heavily wooded valleys of southern England. I have once or twice lightly earthed a forest badger into his den. A few hours after I closed the holes, he has opened one or two of them just sufficiently to admit air, but not enough to allow the passage of his body, and as much as five days have elapsed ere he chose to let himself out. It may be argued that he feared a trap, but if this were so he would surely have engineered another exit, and so speedily have quit the unpleasant place ?

Food is not generally so abundant in moorland districts, with the result that the badgers are unable to gorge, and so are out almost every night. The more food that there is, the more do they eat at a sitting, and the longer the spells underground between each banquet.



## CHAPTER VI

### SCATOLOGY

THE badger is far and away the cleanliest wild animal that we have—indeed, it is the only one of our burrowing beasts which seems to possess any idea of healthful sanitation. And since cleanliness of habits, the power of profiting by previous experience, and a sense of devotion towards one another outside sexual interest, may be taken as the three most infallible measures we have whereby it is possible to gauge the intelligence of wild animals, we are compelled to regard the badger as high up on the mental scale. As regards sanitation, the badgers have few rivals in this island or elsewhere. There can be no doubt but that the male has some affection for his mate and cubs, and as for profiting by previous experience, the badger warren is sufficient proof of this power. They have learnt by years of sad adventure that immunity from their foes can be found only in the arms of Mother Earth, they have learnt to construct their earths to resist their foes, and, as I hope to show

subsequently, they have developed on lines generally which have enabled them to hold out. In sanitation the badger is ahead of the beaver, and as an engineering feat the badger warren all but rivals the beaver city.

That the badgers keep their dens scrupulously clean is shown in their habit of collecting bedding and renewing it at regular intervals, also in the way they have of never occupying one warren long enough for it to become verminous. That they guard against uncleanness of this kind when in a wild state is proved by the fact that a verminous wild badger is an extreme rarity, whereas they quickly acquire guests if kept in captivity under unwholesome and unnatural conditions. Indeed, a captive badger will not settle and prosper if the conditions of his confinement are such as to jar upon his personal pride.

Only on one occasion have I found traces of badgers disregarding their customary rules in the cleanliness of their warrens, which happened in the case of several young ones using the same warren. When the young are very small the mother tends their needs by scraping out all soiled bedding and leaving it in some inconspicuous place near the warren mouth such as under a whin bush or roughly buried in the sand. Visiting a warren near Hutton I noticed a wisp of foreign-

looking hay sticking up from the centre of a sand-bed, and digging down with my stick I unearthed quite a quantity of old bedding, the condition of which clearly indicated that it had formed part of the domestic crib till the mother removed it.

When first the young begin to move to the warren mouth they are, like all young things, apt to transgress against household custom and propriety, but they very soon learn to accompany their parents. A plot of ground is laid aside at some little distance from the sett, and here shallow holes are dug after the fashion of primitive man. The holes are usually about six inches deep and five inches wide at the top, and each one is used continuously for so long as its capacity permits. No attempt at covering the excrement is made either while the hole is in use or after, though in due course the old holes become covered by the scratching of new ones, or by leaves and sand drifting into them.

These little cemeteries usually extend over an area of two or three yards, the holes being a few inches apart, though naturally the area employed and the number of scratchings in use depends upon the population of the warren. In some of the large warrens in the New Forest I have known two plots to be in use at the same time, while three or four others very recently abandoned could be seen. Each plot contained,

perhaps, eight or nine scratchings, and while studying the Hampshire badgers it often occurred to me that the using up of convenient space for this purpose might have something to do with the periodical flittings. Very often the hollow left by the activities of the earth stopper in filling up an old burrow was used as a sanitary pit.

In the New Forest there is very often a distinct runway from the warren mouth to this place, as shown in one of my photographs—so distinct, indeed, that it immediately catches the eye on one visiting the place, but in the case of isolated warrens I have had to search diligently for the plot. Often it is eighty or ninety yards from the sett, but on finding it one can tell at once whether the warren has tenants or merely a single tenant, and whether cubs are there. The nature of the excrement also conveys a good deal as to the foods which the animals are favouring, and when in doubt whether a warren is in use it is the first thing I look for. That, indeed, and the “feetings” immediately convey a good deal as concerns the occupants of any warren newly found.

### Lodgers

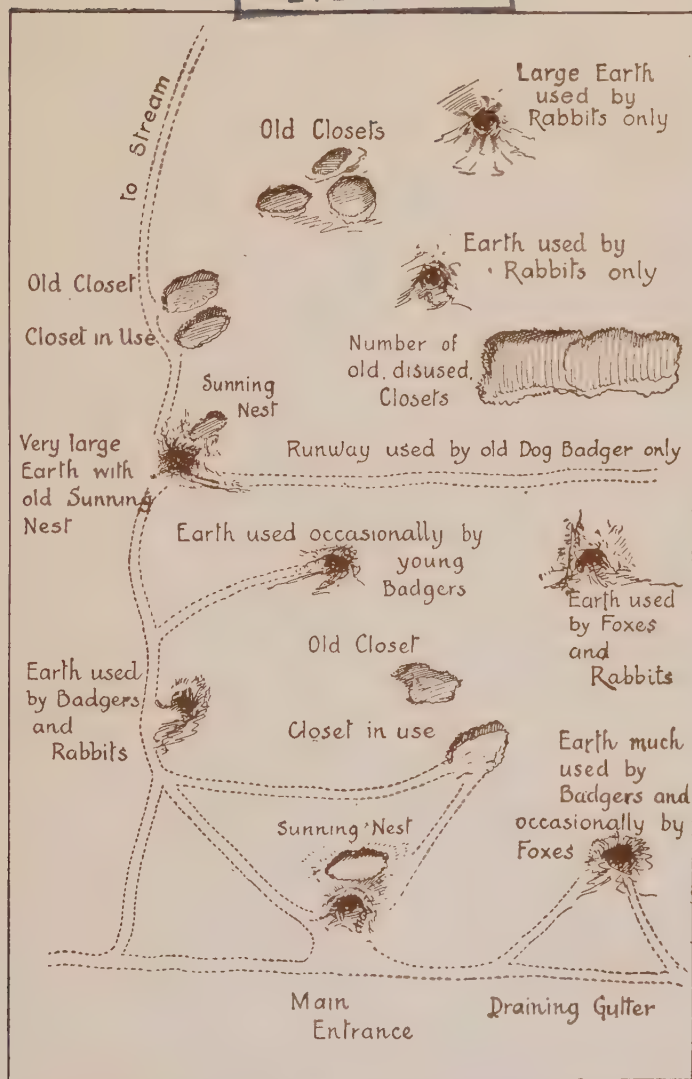
I have never known a badger sett of any size to be without its rabbit tenants. One or two warrens which



I visit regularly contain literally scores of rabbits ; their runways extend in every direction, and they are a great nuisance when trying to steal a covert glimpse at Brock. No doubt Brock tolerates their company simply because it is too much trouble to turn them out—indeed, he is so much less nimble than Brer Rabbit that I doubt very much whether he would succeed even if he set himself the task. Foxes also make free use of Brock's stronghold, and very often a vixen will rear her family in the same earth as a mother badger is rearing hers. Indeed I have known young foxes, young badgers, and young rabbits all to occupy the same earth—a seemingly impossible combination, yet one which appears to work quite well in practice. Possibly a few young rabbits pay the penalty of the folly of their parents' choice, but they are not a very intelligent race, nor do they possess the gift of profiting by sad experience.

The fox must, indeed, be a very unwelcome guest, for while the badger likes to keep his home clean, and anything in the way of carrion is repulsive to him, the fox is just about as untidy in his home life as could be, and loves to fill his den with a stinking mass of bones and refuse. No doubt the badger's habit of periodically spring-cleaning his dwelling is the result of long familiarity with Reynard, who for

WORKING MEN'S  
COLLEGE  
LIBRARY.



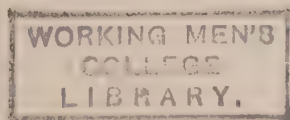
PLAN OF BADGER WARREN SHOWING TYPICAL OUTLAY, RUNWAY, &C.



many ages has been glad enough to avail himself of the opportunity offered by Brock's superior architectures.

Normally the badger is in every sense the fox's friend, and in return he gets a dirty home, a neighbour ever ready to leave him in the lurch to do the fighting, and, more often than not, a good deal of ill-treatment from the very men who have Reynard's welfare at heart.

The question as to how many badgers may occupy a given earth is always an open one. Some earths which, judging from external appearances, are not very large, may disgorge two or three families in addition to various lodgers as darkness settles. One warren I knew, the furthest hole of which was seventy yards from the main entrance, certainly contained two families and occasional individuals which chanced to drop in with the dawn. Smith, the keeper at Boldrewood, who all his life has had unique opportunities of studying the badger, and has taken full advantage of his chances, tells me that after digging disturbance one warren may contain several refugees in addition to its usual residents; but he thinks that, except in the case of the very largest warrens, the families prefer to live alone. When more than one family occupies the same warren it is probably so



spacious below that the respective families have their respective flats, and meet each other merely as chance acquaintances in lobby or entrance hall. As many as twelve foxes and four badgers have been known to occupy a couple of earths, the four badgers consisting, we presume, of a mated couple and their two cubs.

### Warrens

As in technical parlance the burrow of the fox is known as his earth, and the stronghold of the otter as his holt, so the warren of the badger is called his cette, set, or sett. Reference has once or twice been made to the more elaborate of these, some of which may be centuries old, and which, like the beaver dams which hold up whole chains of lakes, and have become an established feature of the landscape, owe their existence to generation after generation of industrious workers. It is to these great warrens which defy the ambitions of the digger or defeat his efforts, that the animal owes its hold upon existence, and just as it is true that badgers cannot become established till they have secure earth retreats, so it follows that they *are* established only where these great setts exist.

The largest warrens, if not the most impregnable, that I have seen, exist in the New Forest. Here the

nature of the ground permits easy burrowing, and some of the setts cover a surprising area. But for the most part they are shallow, and afford but doubtful security from the digger. In the dale country of the North Riding there is very often little external evidence as to the extent of a warren, four or five holes being all that meets the eye, but the enormous dump heaps outside these bear eloquent evidence as to their extent underground. Few exits and entrances in the case of these moorland warrens are likely or possible, for, as a rule, the tunnels run inwards on a steep incline, either on the breast of the hill or at the foot of a ravine, with the result that—taking it that the burrows extend horizontally, which is not always the case—they attain an enormous depth from the earth's surface in the space of a comparatively short distance. This is generally the strongest kind of warren, and may run to several storeys, which is rare in the case of a warren located on the flat.

The digging out of many of these warrens would obviously be an impossible feat, especially as the ground is generally rocky, and Brock, like Reynard, knows well how to put the rocks to good use. There is, indeed, no end to his tricks in the art of architecture. A little way down, the hole, spacious enough to that point, may be found to run off suddenly at an unexpected



angle, then presently to narrow between two boulders, leaving an opening so small that one wonders how an adult badger can squeeze through it. Indeed, it would seem that the animals possess some sense as to what lies ahead, and influence the direction of the tunnel accordingly, for at these narrow places they can hold up the intruder.

They are specially fond of hollowing out a nesting chamber under a boulder of rock, weighing, perhaps, some scores of tons, and affording, at any rate, protection from the spade, and even from dynamite.

The step up, later referred to in a warren existing in Wharfedale, and beyond the step a narrowing of the hole, so that the badger can lie on the brink with his flanks shielded and only his jaws exposed to any foe attempting to leap up at him, is a common trick and an effective one. No doubt more terriers have been lost by the badger's mode of defence in this way than by any other trick to which the animal is known to resort, for it will be seen at once that the invader has no chance of passing the barrier unless Brock wills it. Half a dozen terriers are as helpless as one, indeed more so, unless they can get behind him, as they merely get in each other's way, while the foremost, crowded on by those behind, is more likely to be killed. And doubtless this kind of

stronghold dates back to the days of the pack-hunters.

The amount of earth the sow badger (the term is not to be encouraged !) throws from her sett in the early spring suggests that she constructs a new chamber each year for the reception of her young. This is in accordance with the character of the animals and their liking for clean surroundings, and in digging out old warrens much evidence is generally found in support of the supposition. Some little distance in, the warren generally opens out into a spacious chamber, the first nursery and birth-room of the earliest pioneers. From this, two or three, or as many as four or five, holes run off at various angles. Along these are other birth chambers with their sub-corridors, and so on indefinitely. Of course the badger employs no fixed rules in his architecture, as does the beaver, so much depending on the nature of the ground, but it is often possible to plot out the old earth and the extensions of each season, each marking, like the rings on the horns of a ram, the passing of a year. If we could study the subject more closely it might, indeed, be possible to draw the simile still further. This year there are but two new shafts from the nursery chamber, indicating that the family was small and not very active—a season of scarcity ; but proceeding to the next family den, we find four new

shafts, each extending further than the last.

As the summer goes on, with food becoming more abundant and the cubs growing stronger, the youngsters work off a good deal of this superfluous energy by digging, which I presume accounts for the extensions from each nesting chamber, and in view of all this it will be seen that an old warren now inhabited by a single family may far exceed their requirements in space, with the result that the various flats become occupied by uninvited tenants. How extensive some of the oldest warrens are we do not, and cannot, of course, know, but judging from the swarms of rabbits I have seen to emerge from a single sett, already occupied by a family of badgers, they must be enormous. Naturally the rabbits make their own additions, in another branch a litter of fox cubs may be busy, and so on season after season. Thus a ferret may become lost for hours in a single earth, though externally there is little evidence of its size, and I have known a small and active terrier, which could travel at speed along a badger creep, to spend two hours or more exploring such a warren, the sounds audible without, often faint and far, suggesting that she was moving and searching all the time.

Anent burrows which contain three or four storeys, Sir Alfred Pease wrote, while describing one of his



DIAGRAMMATIC PLAN OF A BADGER WARREN ILLUSTRATING GROWTH  
FROM SEASON TO SEASON.

The nests are numbered in the order constructed and used. No. 1 is very ancient. No. 3 indicates a season of prosperity and large litter. Chamber X, and the passage-way leading to it from 1, is a late addition; a second family of badgers, or a litter of fox cubs, making use of it at the same time as Chamber 3 comes into use. "B" are the pockets or blind leads, sometimes caused by earth filling in an exit. "P." denotes playgrounds.



digging experiences: "There were three holes, and not very far apart. The farmer told us that badgers had been there all his life, and no one had ever been able to dig them out. We dug a trench . . . some six feet deep, and were nearing the sounds of the subterranean conflict which had been sustained by the terriers, when suddenly we found that we were above the sound, and we sent a shaft down three feet from the bottom of our trench, to find galleries and chambers in all directions. The battle had by this time moved, and we were in despair at the prospect of following on the level, with a depth of nine feet of surface soil to be lifted in every direction we turned. I was listening at the bottom of the trench, having penetrated to the third storey of this underground barrack, when I distinctly heard the bump-bump of the badger below me. My companion came down and listened too, and there was not the slightest doubt that there was a fourth storey and labyrinth of passages some three or four feet below us, and for anything we knew another one beyond.

"The day was far spent, the task was impossible, and the rest of our time was devoted to getting the terriers out and making as good a retreat as we could before the victorious enemy. I should think this cetter was hundreds of years old, and some of the passages

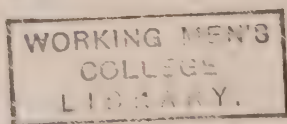


the farmer told us were a hundred yards long!"

This quotation adequately bears out some of the foregoing statements.

In the mountain cairns it is, of course, a different matter, and generally there is little external evidence of activity. The badger corridors tap natural corridors and crevices, and often, no doubt, open into spacious caves, which are used for nesting purposes. Little or no active tunnelling may be necessary, and there is room enough underground for the earth removed by what little takes place, so that very often there is no external evidence that a cairn is tenanted. Elsewhere the sand scratched out is speedily washed away by the heavy rains, so that even to the most observant eye only the snows of early spring have a story to tell.

It will be realised that some of the rocky strongholds may extend for hundreds of yards, there being no end to the maze of crevices, ledges, and passage-ways. It is a fortress after Brock's own heart, and woe betide the terrier which travels too far, for misfortune may befall him in a dozen different forms. I have known badgers to take up residence, as foxes commonly do, in an abandoned lead mine, all the vast workings of which were at their disposal, and where, to introduce a terrier, was assuredly to lose him. His fate in all probability would be a terrible and lingering one.



## CHAPTER VII

### HIBERNATION

THE instinct and inclination to sleep away the winter is more strongly developed in the badger than in the bear. The badger is always quite ready to hibernate, but the bear is glad enough to dispense with the rather dull proceeding should conditions permit. I have known a common black bear pet in a Northern trading post to remain awake and lively all winter, despite the Arctic conditions. He knew evidently that he would never want for food, and so he was glad to remain up and about. Old male bears seldom hibernate.

As winter draws near, however, the badger, even in this mild country, begins to show signs of winter torpor. His spells above ground become shorter and shorter, his rests underground longer and longer. Even in captivity the tendency is very noticeable. Brock takes to his bed of straw, and spends hour after hour breathing so slowly and lightly that no movement of his body can be perceived. Occasionally he gets up to take his food, but he eats little and returns

immediately to his couch. In winter I have had to prod and lever a half-tame badger in order to obtain possession of his food bowl, but it takes quite a lusty dig to rouse him, whereupon he is up with a start, to blink at me sleepily.

I should say that among the creatures of this land the badger falls midway between the squirrel and the hedgehog as regards the habit of hibernation. He takes the matter more seriously than the squirrel, but less seriously than the hedgehog. Even in the wildest and windiest glens in the Highlands the squirrel population, or at least a fair percentage of it, may be astir at intervals the winter through, while in the Bournemouth locality and doubtless throughout the south coast, I doubt whether the squirrels "hibernate" at all. The hedgehogs shuts himself up in late autumn, and providing he is well fed and fit and his den all that it should be, he may not stir again till March.

Unless the winter be an exceptionally severe one, even the Highland badgers do not sleep away the entire season. Under the most severe conditions, these mountaineers may remain underground for six or even eight weeks at a stretch, in which case they are astir earlier in the spring, no matter what the weather, than during a mild winter, when they are

up and about at irregular intervals. Even on the loftiest ranges I have seen fresh badger signs the whole winter through, but I repeat that the conditions may be such that they do not come above ground for several weeks. When the conditions are so bad as this it is generally difficult to reach their ranges. I should say that normally the Highland badger spends half the time above ground in winter that the forest badger spends. But it must be borne in mind that he lives in a leaner land, and if an abundance of autumn foods were his, I doubt whether the mountain badger would stir at all during the lean and icy months.

Of course a great deal depends on the range—its aspect as regards shelter, the abundance of food, and so on. I have no doubt that on many ranges the badgers hibernate in the true sense.

In the moorland localities of the North Riding there are almost always one or two above ground. One can find their tracks at almost any time, except, of course, during the wildest spells, but it may be taken that for every one above ground there are a dozen underground. They are never what might be called active during the mid-winter weeks. Though there are one or two prowlers, the species is not astir in the true sense till the curlews return to the hills.

The New Forest badgers, on the other hand, merely sleep away the wintry spells. They seldom spend more than eight or nine days underground at a stretch, and I have known a family to change its quarters in midwinter for no apparent reason, leaving one sett and taking up their abode in another a mile or even two miles distant. I think they breed a good deal earlier in this locality than in the North Riding or in the Highlands, for the first indications of activity begin to show very shortly after Christmas, whereas in the hills there is very little doing among the badgers till on into February.

Unquestionably the badger can go without food and remain in a more or less torpid state for a matter of three months if so he chooses, but circumstances are seldom such that he is called upon to make full use of his gifts in this direction. Anent the power to exist for a long period without food, Mr. Fairfax Blakeborough writes: "When the late Tom Green had a string of horses in training at Hambleton, he and his hind one day saw the track of a badger fresh in the snow. This was about Christmas day, and on following the badger to his home among the rocks they set a trap and walled it in very tight, so that Brock had to come out into the trap, or, as the only alternative, starve to death inside. For no



less a period than fourteen weeks the badger refused to take the trap, but then he abdicated, and was taken alive. He was found to be very thin, at which one cannot wonder. Although this well-authenticated case goes to prove that the badger can exist for quite a long period without any further support than he can obtain from his internal supply, it must not be taken that every member of the species would be in a physical condition to hang on to life for anything like fourteen weeks without food."

This, at any rate, settles all question as to whether the badger can rightly be set down as an hibernating animal.

The badger, like all the weasels, is the possessor of highly developed musk glands, the economic purpose of which has been widely discussed. Most animals possess these glands, variously placed and taking diverse forms. They are most highly developed in the weasels, and reach the zenith of "perfection" in the skunk, whose mode of defence is widely known. In the polecat, also, they are abnormally developed, with the result that the animal has earned a lively reputation.

Normally, it may be taken that these glands exist as an aid to matrimony. They afford a means of intercommunication, and intercommunication in the wild, as already pointed out, exists solely for the purpose of



bringing the sexes together. Weasels and martens are known to have certain musking places, at which the owner of the glands is accustomed to pausing as it passes in order to rub the glands on some protruding obstacle, such as a ledge of rock or a conveniently placed branch. So it leaves its body scent in no unmistakable terms, and in a way which will survive several days of sun and rain, so that others of its race, if not of its sex, are duly notified, and can, if it be so, leave the record of their own proximity.

The courtship of the badger is, of course, shrouded by the kindly shadows which hide so much of its life, but so far as we can judge the animal does not use its scent glands as do the other members of the tribe. Yet they are highly developed, and must be there for some good purpose.

The result is that all sorts of explanations have arisen, and it is doubtless owing to his equipment in this line that the old and unjustified saying, "stink like a badger," came into existence. We find in early works, indeed, allusions to the animal's power of ejecting the fluid as a method of defence, like the skunk; but if the badger possesses this power, he certainly does not make use of it. Sir Harry Johnston definitely states: "In the badgers the foetid slime exuded from these glands is rubbed upon vegetation and the

soil, and no doubt serves to attract one sex to the other." This is, of course, the natural conclusion, but the belief seems to lack support from other authorities, and I must say that my own observations have been entirely lacking in anything which seems to suggest that the glands may be so used. I have watched both wild and tame badgers playing in the early spring of the year, and if the glands were so used the habit of rubbing them would become an entirely spontaneous one, exercised at all manner of odd moments, as in the case of the lesser weasels. With them sexual excitement leads to a sympathetic excitement of the glands, which probably causes some slight irritation, as they are noticeably red and swollen, and the habit which serves so useful a purpose is exercised unwittingly, and without any suggestion of secrecy. In the badger, however, the glands are at the zenith of their development when the animal is fat and ready to den up in autumn.

Again the theory has been repeatedly propounded that the secretion serves as a tonic or as a means of sustenance during the long foodless periods of the species. This view is upheld by some of the best authorities, and Sir A. E. Pease, Bart., writes : "I am, however, inclined to believe that from this source he is able to maintain his health and support life during

those periods of seclusion and total retirement in his 'earth' which have led naturalists to describe him as a hibernating animal.'"<sup>1</sup>

This, of course, may be so, and I find myself totally unable to suggest contradiction or to offer corroborative proof. All I can say is that if the glands exist in the case of the badger as a reserve supply for foodless periods, the animal is peculiar, and his case without parallel in his own family or in any other. The suggestion is that they are there as a means of assisting Nature's course of hibernation, and that, as other animals store food, so the badger lays up a supply in the anal glands, which elsewhere in nature are purely sexual—as their position and the aromatic powers of the secretion would suggest in this case.

My own opinion is that in the badger, as in the other weasels, the glands have no bearing on the animal's winter habits, but are there for the common purpose—intercommunication. From them arises the faint aroma which distinguishes a badger warren; it is essence of badger, it is his abstract personality. They are used as are those of the hare, as is the scent of flowers, to convey a wireless message, "Here am I,

<sup>1</sup> In this connection the badger is less remarkable than the she black bear, which gives birth to her young during hibernation, and in full possession of all her faculties may nurse them for three months or more ere she is able to escape from her icy den.—H.M.B.

where are you ? ” By these glands one badger is probably able to scent another from miles away, as hare scents hare, as the bees scent the flowers ; and so the sexes are brought together in places where their meeting is most necessary for the survival of the species, that is, where the individuals are few and far between.

Before dismissing this subject, mention might be made of two other spheres of usefulness into which the service of the glands has been pressed by other animals—the first, the purpose of marking individual property, as is done by the wolverine, as a means of polluting food in such a way that no other beast but the polluter will touch it. There is absolutely no evidence that the badger resorts to the habits of musking such food as he cannot immediately dispose of, but we have still a good deal to learn about him.

The second use of the scent glands is seen in the case of the stoat and the weasel—to terrorise. There is no doubt that these little animals have the power to control the scent they give, and from my own observations there is further no doubt that they use the scent in their hunting, and that it inspires the utmost terror in their intended quarry. Thus a rabbit will lie down and squeal, in a helpless condition, before it has even seen its russet pursuer, and repeatedly I have had stoats pass quite close to me, and have never

detected the faintest stink until the animal detected my presence, whereupon the whole surrounding atmosphere became impregnated. We have already decided, however, that the badger does not use the secretion as a means of defence, and since there is no dividing line we may take it that the same applies to attack. In other words, excitement does not bring the muscles which eject the fluid into use.

One argument put forward in support of the theory that the contents of the glands are used as a means of sustenance, is that a badger at the tail end of winter is often in remarkably good condition, despite the fact that it has taken little food for some weeks previously. I doubt, however, whether the beast that had hibernated in the true sense would carry much fat, for obviously a badger requires little food during the period that it is inactive, and that little it normally gets. Certainly a bear on rousing from its winter sleep is lean, savage, and thirsty, and often little more than a bag of bones, but when a bear hibernates at all he does the thing properly. Badgers mate in the early spring, and so begin to lose weight immediately they resume activity. Clearly, Nature has endowed them with powers which enable them to go foodless in winter without becoming emaciated, and thus rise active for the mating season ; but it remains an open

question as to whether the secret of this power lies in the anal musk glands.

With the very first indication of spring the male badgers become restless, moving from hillside to hillside, and taking shelter in the shallow cairns to which they are often tracked, walled in, and duly beset by terriers, while the females take to cleaning up the earths, throwing out vast quantities of soil and bedding, and leaving everywhere the signs of their activity. They seem, indeed, quite unable to resist the temptation of cleaning and enlarging every hole they find, for the spring cleaning fever is an even more serious malady in the badger world than in the world with which we are more familiar. The home in which the cubs are to be born is given first attention, but every other warren within reach is duly assaulted. When the cubs are three months old or so, they are moved, as already described, to one of these outlying earths, previously prepared for their reception, and it may be taken that each badger family has two or three recognised burrows, from one to the next of which they move at regular periods.

Badgers collect bedding and drag it into their warrens the whole year round, but they are most active in this way during the autumn, when the runways leading to the warren, and indeed the whole



vicinity, is littered with bedding. They prefer grass, and will go some distance to obtain it, but if there is no grass at hand they make shift with bracken. Often there is a distinct runway from the warren to the "hay field," and the bedding, as collected, is rolled into tightly wrapped bundles for the purpose of easy handling. These bundles are often to be seen left on the runways. The bedding is torn and raked up, and as time passes bare patches are left among the vegetation, the animals stripping the earth as beavers strip the banks of their streams of timber. The animal carries the bundle between its forepaws and its chin, rolling, pushing, and nosing it over the earth ahead of it; or alternatively—according to some authorities—it walks backwards, dragging the ball of bedding after it, and so disappears tail first down the hole. In this way immense quantities of vegetation are gathered and carried into the holes, but at regular intervals the old supply is pulled out, and a good deal of earth with it, and a new supply substituted. Thus it will be found that the immense dump heaps outside the main earths consist largely of old and rotten bedding, intermingled with the sand.

Almost every warren has its recognised sunning site, so placed that it catches such warmth as there is during certain hours, and here father—presumably—

is fond of lying and sunning himself while the children are asleep below. The couch is invariably situated directly above one of the main holes, so that should the occupant be disturbed he has nothing to do but fall underground. The animal makes a large bed of grass from the general supply, and curls up in the hollow of it. The bedding of which it consists is never left above ground during the intervals when not in use. It is carried there each time for the purpose, and having had his forty winks the animal drags the supply back into the hole again.

Thus these open-air beds are seldom seen, for the badger conducts the habit with much secrecy. I have, however, repeatedly found the nests in the New Forest, and have photographed them—having, evidently, come upon the sleeper so suddenly that he had no time to hustle the bedding underground. Smith of Boldrewood tells me that he often finds the beds so recently vacated that the hollow is still warm from contact with the animal's body, but returning a little while later it has invariably been removed, especially if he has handled it. Smith showed me the first of these nests I ever saw. I immediately went for a camera, but returning an hour or so later I found that the material had been removed.

So frequent is this habit that almost every warren

will be found to have its sunning couch, where a slight hollow is worn in the earth by years of use. As stated, it is invariably above one of the holes, and generally against the trunk of a tree.

Mountain badgers do not seem to resort very much to the habit of dragging bedding into their cairns, which are usually among the naked rocks, and quite cold and bare the season through. As a rule there is very little bedding material available, which may account for the omission.

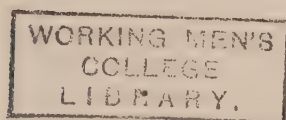
Badgers in captivity often betray their natural instincts by carrying their bedding about, moving it from place to place, and making a good deal of fuss about nothing at all.

### Vocal Powers

The familiar pig-like gruntings and the deep, short growls and snarls are the only sounds I have heard the badger utter, but Sir Harry Johnston and other authorities say that the animal is capable of yapping and barking much like a dog. These sounds are uttered, presumably, only by tame specimens, which do not fear to make their presence known.

Under date June 14th, 1912, I find the following entry among my rough notes: "New Galloway: Fishing near Kenmure this evening I disturbed some-

thing in the undergrowth which went off through the bracken, grunting like a badger, save that the grunts were interspersed by short, deep barks. I paid little attention to the disturbance, merely thinking that I had disturbed a roe deer, which were very numerous ; but if it is true that badgers sometimes bark, this was probably one of them ! ”



## CHAPTER VIII

### BREEDING AND YOUNG

ONE of the most closely guarded secrets in all wild nature is the period of gestation of the badger. Zoologists have found it difficult to believe that so small an animal can carry its young for one year, and all sorts of discussions have arisen and various theories been advanced to circumvent the knotty problem. The main question is—when does the badger mate? We know that the young are born early in the spring, generally between the middle of February and the end of March. I have seen them repeatedly about the den mouth in mid-March, but have not noticed the footings of young badgers earlier than March 15th.<sup>1</sup> From February, then, on into July, the females drop their young, but the majority of them certainly not later than Mid-March. The later cubs are probably from very young females, or very old females, or females which missed conception at their first mating, and so mated again in the later season.

<sup>1</sup> In the New Forest.

WORKING MEN'S  
COLLEGE  
LIBRARY.



A HALF-GROWN BADGER.

*Photo by F. Pitt, Bridgnorth.*





My own opinion is that the badger *does* carry her young close upon twelve months, but let us view the question from its various aspects. Quoting Captain F. H. Salvi, Mr. J. E. Harting, F.Z.S., F.L.S., wrote in the *Zoologist*, January, 1888: "My badger, which had her first family of one (a female) on February 27th last year, presented me with another family on February 16th this year. Naturalists will, therefore, be glad to learn that I can now settle that vexed question, the gestation of these curious animals, for this badger has gone with young a year all but about seventeen days."

Sir Alfred Pease says that "they go with young about nine months," and he thinks that the mistake made by those who conclude that they go over a year is due to the fact that "the animals do not breed yearly."

Personally I fail to see that the fact that badgers do not breed yearly—and I believe that they do until senile decay sets in, otherwise the species would not retain its footing—has any real bearing on the point. The badger which did not breed one year would probably mate as usual that season, and so would give birth to her young the following season without misleading anyone.

Most Continental authorities seem to be of the opinion that the species mates in autumn, which

reduces the supposed period of gestation a matter of six or seven months, but these same authorities are rather given to a bold statement of opinion, without convincing reference or proof of their beliefs.

Sir Harry Johnston writes: "It would seem as though the normal period of gestation was about six months, but apparently the female badger, like the roe deer, has the power of retarding the development of the foetus, so that cases are recorded of female badgers having gone with young for more than twelve months."

Sir Alfred Pease suggests rather the same line of reasoning, for he remarks that: "It seems possible that the female has the power known to be possessed by the roe deer of postponing the operation of parturition for a considerable time."

The suggestion is that a female badger in captivity can postpone the period of parturition a matter of some months, but so far as I know even the roe is not able to do this. What really does happen in the case of the roe is this—the embryo does not develop, or at least develops very slowly, during the first four months of her pregnancy, after which the development of the calf proceeds normally, so that she carries her young close upon four months longer than is normal. This peculiarity of the roe is probably owing

to a total change of environment—that is, the animal originated under semi-tropical conditions, and migration northwards during the glacier age led to the power referred to—a postponement in the operation of parturition. So far as one can judge, the roe of to-day are not able to adjust the period of gestation to suit given circumstances, so that the comparison falls flat.

With most animals, a disturbance in their order of living shortens, rather than lengthens, the period of gestation. A vixen will often slip her cubs immediately if taken into captivity, and otters have been known to give birth while pursued by hounds. A cow will “pick” her calf if much harassed by dogs, and in spite of such excellent authority it is difficult to believe that a pregnant badger taken into captivity is able to lengthen her period of gestation in the hope of better days.

Vyner states with certainty that “badgers go twelve months with young,” while Speedy writes that according to his friend, Mr. Paterson, of Rutherford, who has bred three generations in captivity, the gestation period is “from the beginning of July till the end of February or beginning of March”—that is, seven months.

Cases of badgers in captivity having gone twelve months or over are so numerous that quotation is

unnecessary, and there is far more evidence in support of their carrying their young this length of time than for a shorter period. A study of their habits in a wild state seems, moreover, to indicate that this is about the period. Sexual excitement is at its height in the early spring, at exactly the time of year that most of the young are born. At this season badgers are found in pairs more regularly than at any other season, and very often in new and temporary quarters, indication that they are running together. At this season also the males are most restless, and most often found in out-of-the-way places. No one, indeed, who has really studied the badger can doubt that the mating season begins in February, and reaches its zenith about mid-March, and even Vogt, who supports the short gestation theory, contradicts himself by stating elsewhere that the mating season immediately follows hibernation, so that the animals begin immediately to lose weight on rising. If then the animals mate in early spring and the young are born in early spring, surely it is evident that the period of gestation is twelve months or thereabouts ?

That the males are restless and that mating goes on till into July is certainly so, but correspondingly there are late cubs. The main point is that most of the cubs are born at the season when everything

indicates that mating is in full swing; towards the end of March excitement begins to decrease, till by the beginning of June the badger community has settled more or less to its normal mode of existence. It is probable that the mother of cubs conceives again within a few days of their birth—at any rate within a week.

If seven months were the period of gestation, mating would be in full swing in July and August, and this certainly is not the case. Moreover, if the many couples found living in solitude together during February and March are not mating, what are they doing? That love matches occur at that season cannot be doubted by anyone, yet September cubs are rare—indeed, I can find no record of them. If seven months were the period all the she-badgers that mate in spring, and admittedly they form the majority, would be busy with their families till on into winter, and how many badger diggers can record having taken half grown cubs later than July? By August practically all the young cubs of that season are well able to fend for themselves.

Let us presume further that the period of gestation is nine months. The female drops her young, let us say, early in March, and on the nine months basis she would not mate again till June. This leaves a



period of three months between the birth of her litter and her next mating, which is a long time. Most animals mate again immediately after the birth of their families—rats, rabbits, hares, and the like within a few hours. There are, of course, many exceptions, but only among those whose period of gestation is short; these mate in the early spring, and give birth to their young in the late spring. They may breed only once in the year, as for example, stoats, and perhaps water voles, but by the beginning of summer mating instincts are dead in both sexes. That badgers follow the same lines, namely, mate in, say, February and give birth to their young the same season, has been so amply disproved that we need not follow the prospect further.

The conclusion is, then, that the female follows the normal course, coming into use a few days after the birth of her cubs, and that at the same season those which have no families that year are running in double harness, as all evidence would seem to suggest. The cubs are born approximately twelve months later.

The young are born blind, and probably remain so for about a fortnight. The mother provides an ample bed for them, generally far back in the most obscure chamber of the warren. Usually, I believe,

she extends a shaft and hollows out a new bed for their reception, as the amount of earth she invariably throws out suggests this.

Two and three are the usual number of young per litter, though my notes on the New Forest badger indicate that four and even five are not uncommon. I may, however, have been misled by the presence of two families in the same earth, as certainly in Scotland and Yorkshire five cubs to one mother is almost unheard of. In view of the smallness of the badger's family, it is not difficult to understand that the hold of the species upon existence, since they breed only once a year, makes little allowance for any great drainage upon their numbers. Indeed, the badger owes its present footing to its own toughness and fighting powers, backed by its architectural gifts in the way of constructing impregnable strongholds.

Each year I marvel that the badgers in my own country manage to hold on,<sup>1</sup> so many are killed wantonly or in the interests of fox hunting. They must be far more numerous than one is led to think, for almost every week during the spring and summer brings news of the extermination of individuals and often of whole families.

If the home warren be invaded, the dog badger fights heroically for his mate and her cubs. He has

<sup>1</sup> Written while living at Hutton-le-Hole.

even been known to wall them in, himself holding the passage-way and paying the full penalty for his heroism. On one such occasion the dog badger was killed by the simple expedient of driving a stake into the ground and impaling him while he fought off the terriers. He was then dug out, but was found to be at the dead end of a hole. So the sett was left, but visiting the place a few days later one of the men found that the "dead end" had been opened up, and beyond it quite a spacious chamber, in which the mother had crouched with her cubs. The tracks on the newly turned earth indicated that she had eventually led them safely away.

Such dramas are not uncommon among these quiet people of the woods, and while the male is all that he should be, it goes without saying that the female is an ideal mother. Her affection for her cubs is very real, and naturally she will fight to a finish sooner than desert them. In North Wales a female was caught in the act of carrying one of her cubs, and though set upon by two sheep dogs and savagely mauled she refused to relax her hold upon her little one in self defence, and finally gained cover with the cub uninjured. If anything Mrs. Brock is a better mother than she is a wife, though we will give her the benefit of the doubt by saying that the numerous scars which usually

cover an old and respectably married gentleman badger are the result of encounters with members of his own sex during his gay youth. All the same, I am inclined to think that Mrs. Brock certainly *has* a temper.

### Night Habits

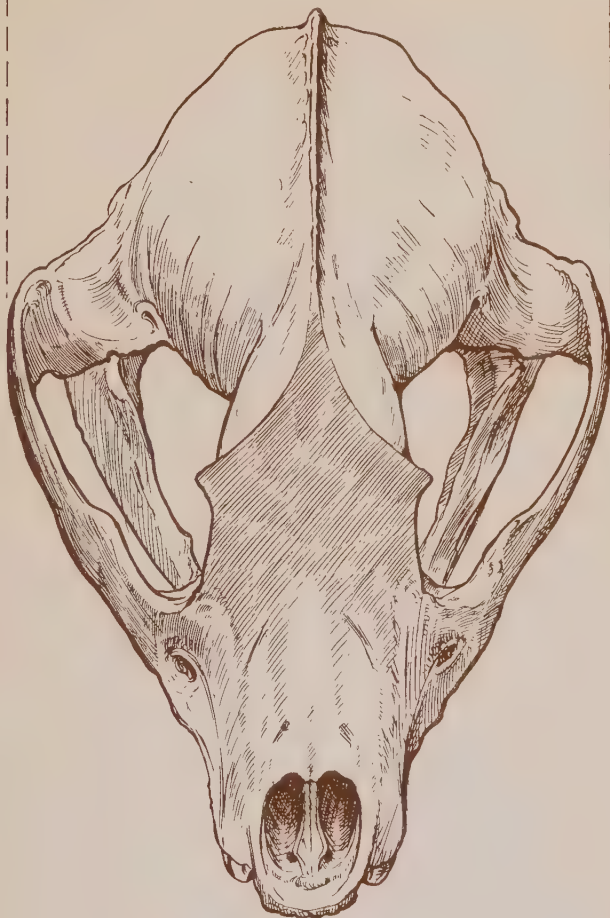
As to how far badgers travel at night-time depends, as in the case of all wild animals, upon the abundance or otherwise of food in the vicinity of their home den. The males wander further than the females, which are content with a very small home range while their cubs are small. Considering that the food of the lowland badger is abundant almost everywhere, he travels further than might be expected. Exactly the same, however, applies to the hare. I have known an old brown hare to come down from the hills and travel to a point eight miles distant from her home seat during the night, performing an immense circuit and returning at dawn. A hare will travel miles to a field of swedes, and so likewise a badger will travel at least two or even three miles in order to visit a bank of "yennets," or some particularly fruitful woodland where the bulbs of the wild hyacinths are more succulent than elsewhere. As summer advances the badger family may be anywhere within a radius of three miles from the home burrow during the dark hours, but one is far more

likely to find them inside the one mile circle than outside it. In the early spring male badgers, of course, travel considerable distances, but generally speaking the cubs, until fully grown, limit the home range of the family.

Though like the bear and the wolverine and so many beasts which belong to the dense timber and are short in the leg, Brock is not possessed of over good eyesight, it is surprising how instantly the animals perceive any movement on the part of the watcher. Lying among the bracken, overlooking a deep washout in which Mrs. Brock and her children could be seen, jogging hither and thither like uncertain shadows in the starlight, I have endured torments from the midges till, unable to stand it longer, I have very slowly and cautiously moved one hand to brush my forehead. Instantly there was a rustling below, and the badger family stood not in the order of their going. They simply went. There is then nothing for it but to pack up, as, their suspicions once aroused, nothing will induce the family to move further than the burrow mouth for the remainder of that night. It is an excellent plan to wear dark, not black, gloves when out on a badger watching expedition, as these not only hide the lily white hands of the watcher, but they afford some protection from the midges, which otherwise play such havoc with one's knuckles !

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Female  $3\frac{1}{4}$ "  
Male  $3\frac{1}{2}$ "



SKULL OF THE FEMALE BADGER SHOWING THE PROTECTIVE RIDGE  
OVER THE BRAIN.





Naturally one takes up a hiding with due regard for the direction of the wind, approaching the spot quietly just before sundown. A dam with young cubs may appear at the den mouth before the light of day is gone, but later in the season they do not show themselves till darkness has settled. Providing one's hiding is a suitable one, there is every likelihood of seeing the family, and I have repeatedly had them pass within twenty feet of my couch. Also I have spent many long and chilly hours of waiting and have seen nothing of the badgers in the end ; but the night sounds as one waits are a story in themselves, and one generally sees at last something worth while. One hears the hunting yap of Reynard, the unearthly squall of Mr. Prickles, the hedgehog, the drumming of snipe, and the weird gurglings and rasping of the herons in the valley below.

If the badgers are at all suspicious, as they often are on windless nights when scents hang about, they may take a considerable time before finally they emerge into the open. One sees a faint movement at the mouth of the hole, and hears a loud sniffing and grunting at one of the adults peers out. He or she does not quite like it, and back the animal goes. Ten minutes of silence elapse, then again that faint movement at the burrow mouth. The animal remains a minute or

so this time, moving forth then drawing back, but finally it retreats again—perhaps only for five minutes. So for half an hour or so the creatures hover about the den mouth, at the end of which time father is squatting more or less serenely on the edge of the huge platform of sand, three or four feet from the dark opening. Here, after much sniffing and gruntings, he finally decides to take the risks, so away he waddles, speedily to vanish into the gloom, and a minute or so later the dam emerges, followed by a scuffle of eager cubs. Once outside their dread of an eavesdropper seems to vanish, and having seen all that we wished to see, we have even conversed in low tones without alarming the family. On one occasion, indeed, my companion amused himself by flicking pebbles at them, which seemed to cause some excitement among the cubs. Possibly they thought that the pebbles were cock-chafers colliding in their flight with the bracken.

It has often occurred to me that a good many badgers, and, indeed, otters, do not recognise man in the flesh. They know the smell of him and dread it greatly ; also they know his voice when he shouts or makes very human disturbances of that kind. But so long as he speaks in soft undertones they take the sound as belonging to some familiar cause, and if they cannot scent him they are filled with curiosity even at the sight

of him. Certainly I have proved this to my own satisfaction in the case of the otter, and I remember some years ago, when travelling in the forests of Northern Ontario in the Mattagami River country, disturbing a mother blackbear and her two cubs. She sat up and looked at us with the most harmless curiosity not forty feet away, then, shifting her position to get the advantage of the breeze, she was off like a shot immediately she smelt us ! Man in the flesh she did not know, but the smell of man was altogether too much for her ! Thus many of our own creatures, which are astir only at night-time, may not come to recognise man in the substance, though the fear of him moulds their ways.

Last spring I spent many evenings watching a large warren which contained at times as many as three or possibly four adult badgers, and three or four cubs. I could never quite weed out the relationships, and it was hard to count them. The stronghold was one of the impregnable variety to which the badger owes its present footing. The holes were at the bottom of a ravine, some forty feet in depth and perhaps fifty feet wide, its banks of sandy clay and almost perpendicular. The ravine lay between the heathered uplands and the bracken slopes of the lower valley, cutting the hill face in two, and so running downwards through the hardwood forests to the stream. The badgers lived a little higher than the topmost timber, and their stronghold

was in many senses ideal. By following the ravine downwards it led them by sheltered and shadowy ways to the dark forests they loved, by following it upwards they had a choice of numerous smaller washouts, draining into the main one, and running out in all directions across the moor.

While the cubs were small, they never ventured far from the security of the warren. At first they would roll and scramble about at the den mouth, usually accompanied by an elder, and a little later they took to roving some distance up or down the bottom of the ravine, which was a mass of drifted sandbanks and wreckage, overgrown at points with patches of bracken and briar. Later still they assayed the climb of the steep bank which their burrows tapped, and so directly past my hiding place, through the lichen-covered fence, and into the closely-cropped pasture, beloved of the rabbits, separating their native glen from the woods on the low side. The cubs would play in the field for hours, and for half an acre or so the corner of the field directly above their warren was covered with the little shallow scratching holes they dug for amusement. By the end of April they were big enough to follow their mother on expeditions further afield, and I was surprised that the family turned up hill as often as down. I believe I could have caught the whole lot any night by

slipping a net over the mouths of the sett after they had departed, then sending round a terrier to hunt them back.

It had never occurred to me that the badgers would choose to parade about the open moor when there was such abundance of woodland at hand, but crossing the moor one night accompanied by a villager, a keen sportsman of the locality who has the welfare of the badgers much at heart, we were about a mile from the big warren when he remarked, "Now we mun look out for a badger."

On my enquiring he told me that it is no uncommon thing to meet a badger when walking along the moorland roads at night-time. The animals travel considerable distances, following the washouts, the sheep paths, or the human roadways, but according to my local friend they are never known to disturb the moor game. Moths of all kinds are abundant in the heather, and doubtless these provide the main attraction for Brock—together with the numerous beetles which are to be found running about the sand banks and hiding under the pebbles.

My opinion is that the dog badger does not accompany his dam and her cubs while the latter are very young. Usually he is the first to leave the warren, and he goes straight away before they emerge. Very often



he has one or two deeply trodden runways of his own, one of which he follows to the moor or the wood or the fells as the case may be. His footings are distinct on account of their size, and following the information I received concerning badgers parading the open moor at night-time, I subsequently found the "footings" of adult badgers far out in the open and at a considerable distance from any warren I knew. It is quite conceivable that the old dog occasionally sleeps out in the deep heather.

As the cubs grow up, the whole family often forage together, father as well as mother taking care of the youngsters, and of course it is impossible to set down hard and fast rules as to the part father plays. Sometimes two adults invariably accompany the cubs, sometimes father is never seen, and mother seems to be living in parental solitude. It may be that in the latter case father is living elsewhere with his *real* wife, for though Brock may be set down as strictly monogamous, he certainly is not blind to the charms of the fair beyond his own best beloved. Decorum of that kind is recognised only in the world of men.

### Open-Air Nests

The foregoing leads us to the subject of badgers laying out, as they undoubtedly do in regions which are

sufficiently off the beaten track, and where there is abundance of dense heather or bracken. It is even said that the dam sometimes has an open-air nest, in which she attends the needs of her cubs above ground, dispensing entirely with earth shelter. Foxes, of course, resort to this practice in the ranges, the young being stub-bred in the true sense, but I should say that young badgers are invariably born underground. Their first move, at the age of three months, when normally they are taken to another earth in order to allow the old one to air and sweeten up, may be to an open heather bed, but I have never seen one of these. I have seen signs of badger frequency in a sheltered, sunny hollow, overgrown by bracken and bramble, but the indications seemed to suggest that they used the place merely for sunning purposes, rather than as a home. In his absorbing book, "The Life and Habits of the Badger," Mr. Fairfax Blakeborough touches upon this point, and, as his evidence is conclusive, I take the liberty of quoting the paragraph in full—

"Mr. Henry Foster, a well-known North Yorkshire gamekeeper, and, albeit, sportsman, told me of one such case in Lord Middleton's country, and Grant, who was hunting hounds at the time, confirmed it. Hounds came across a badger asleep in some deep bracken and killed him. His lair, kennel, or couch (whichever you

may prefer to call it) was found to be in a hollow, and to contain quite a cartload of dead bracken, well pressed down and so arranged as to shelter the sleeping animal from all wind and weather, as well as from the eyes of anyone who chanced to pass by, and yet not come directly upon the place. I remember some ten years ago finding a similar lair on Viscount Boyne's Baysdale property. There were unmistakable signs of one or more badgers (for, as has been previously pointed out, the badger does not lead the solitary life generally attributed to him) having used it. The most conclusive evidence was the presence of grey hairs, and almost equally satisfying was the adjacent dunghill. On my next visit I actually came upon the family at home, to my intense delight and excitement. It is hard to describe my feelings. Had I been stalking a royal for days and at last come within gunshot, had I been big-game hunting and the most coveted specimen was in my reach, I could not have been more "nervy." My heart palpitated, my hands shook, and I trembled in every limb. I dare not go forward in that condition, so I stood stock still—mesmerised! At last I controlled myself sufficiently to creep towards the open-air kennel. The wind favoured me, and I crept on gradually and got so that I could peep at the sleeping twain. They were not laid as I had usually seen badgers, they

had not one foot in the mouth, they were not curled, but full length, pretty much like pigs, the nose of the one to the hindquarters of the other. There was no noise of breathing, and inhaling only took place about once to thrice on my own part, though my own abnormal condition might have had something to do with this. I found them asleep and I left them asleep, all unconscious that one of the most friendly of their arch-enemy, man, had been within arm's length of them. Of course to live in the open in this way is out of keeping with the natural habits of the animal, though they not infrequently take sunbaths on boulders overhanging precipices, and on hillsides, upon which instinct tells them they cannot easily be reached, however deep their slumbers."

It may be of interest to follow the rambles of a badger family on one of their starlight forays. We will take the scene as the New Forest, and the company as a mother badger and her three cubs. When first they emerge father is with them, and for ten minutes the little group dally in the vicinity of their sett, the cubs, bunched together, scratching away the earth round the roots of the rough barked trees in order to nose out the insects which have followed the crevices in the bark down below earth-line. In manners they are a strange mixture of little pigs and small bear cubs. Now and

then one will sit back limply on its haunches, not in a begging attitude, but with its back hunched up and its forepaws on the ground, watching the others while they root. All three noses are generally within the radius of a saucer, each searching for what he imagines the others to have found, till, having exhausted the possibilities of one much frequented spot, one decides to trot off to the next, and the other two jog along behind till they bunch again. They are very contented, unambitious little creatures, and it is seldom that difference of opinion rises between them.

Meantime father, having made one or two simple adjustments about home, jogs off on his usual runway which leads straight into the moonlight, then down the centre of the riding in a way which suggests that he is not afraid of much when man and his dogs are at home. The most precocious of the cubs makes as though to follow him, but is clearly given to understand that its company is not needed. It returns to mother, who, having sniffed each in turn, sets off in leisurely fashion towards the near side draining gutter which follows the riding. These gutters checker the whole vast forest, and being about eighteen inches deep and a foot or so in width, they become overhung by vegetation, and form herbageous tunnels from one to the next of which the badgers can run, thus proceeding unseen to and from their



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"ON THE PROWL." BADGER CUBS TWO-THIRDS GROWN.

*Photo by F. Pitt, Bridgnorth.*

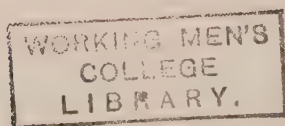




feeding grounds. So secure and convenient are they that the badgers use them by day as well as by night. Having gained the gutter the family jogs along it in the decided direction. They are eating all the time, for worms and beetles have dropped into the pitfall, to seek doubtful security under clod or stone, and nothing escapes the sensitive noses of the badgers. Also there are slugs and snails in the grass and roots on either side, and so, by restaurant car, as it were, the family adjourns to its appointed feeding ground, which chances to-night to be a wild raspberry clump in the midst of the ruins of an ancient cottage holding. Here they devote themselves strictly to business for the space of perhaps an hour, plucking all the berries within their reach, pulling down branches and leaving broadcast the signs of their visit, till the cubs, becoming gorged, cuff and tumble each other about in half-hearted playfulness, till mother leads the way home. So they go straight back, perhaps visiting that plot of ground sacred to their possession ere they seek the earth, sleepy and contented, and father, gorged to repletion, comes home with the milk.

Such is a picture of a night in the life of a New Forest badger family as faithfully as I can draw it. Naturally their routine varies with their environment, but always they act in the manner of creatures which

love peace and plenty, wasting little time above ground, and ready, immediately their immense appetites are satisfied, to return to the warmth and comfort of their underground beds. Of course we do not know that they are idle underground. Evidence would contradict this, for surely their immense warrens are the result of generation after generation which has spent its spare moments improving and extending ? Like the beaver dam, the badger sett is never completed, and just as the beaver dam which holds up thousands of tons of water and enables whole beaver colonies to live in plenty and security—just as these engineering feats to the beaver bear evidence to the industry of many generations, so does the badger stronghold bear evidence of the industry of a race which has come to know by sorrowful experience that the earth is the one sincere friend that they have.



## CHAPTER IX

### INFLUENCE ON FOX HUNTING

ONE concludes that there must be some good reason for the bad odour in which the badger so often stands in fox hunting country, but I find myself poorly qualified to give that reason. Perhaps this is because most of my life has been spent in the ranges where Reynard is merely regarded as vermin.

I have, however, many fox-hunting friends, whom I have never ceased to ply with questions, the outcome of which is the conclusion that among those who take an intelligent interest in the natural history of sport, Brock has few real enemies. His worst foes are among those who believe unquestioningly what they are told, and take the rest for granted.

By this I do not mean to cast any reflection upon the many first-rate sportsmen who have no use for Brock on the hunting field, but at the same time I certainly feel, as every other student of the badger seems to have felt, that—unwittingly perhaps—a rather narrow-minded prejudice has no little to do with the maltreat-

ment the badger generally suffers from hunting circles. The reasons commonly given are—

1. Too many badgers render the task of the earth stoppers an almost impossible one.
2. They drive the vixens and cubs away.
3. They kill cubs.
4. They are a great nuisance when hunting, as a fox which goes to earth with a badger is difficult to dislodge.

Dealing with these in order, number one is rather trivial. In the New Forest the earth stoppers manage somehow to encompass their work, and badgers and badger earths are more numerous there than elsewhere in the country. Yet the keepers, who do the earth stopping have no quarrel with them.

A badger seldom opens up a stopped earth within twenty-four hours, unless it be just sufficient to admit what little air he needs. Where badgers are established they do not make many new earths, neither do the foxes, with the result that the earth-stopper's task is a straightforward one. He has merely to stop the old burrows, the whereabouts of which he knows ; whereas, if there are no established setts of this kind, foxes are apt to run to earth in the most unlikely places, so that no matter how active and watchful the earth-stopper

may be, his efforts may prove useless. In other words, give the fox one or two good sound badger setts to go to, and he will run for them, but give him no earth shelter except what he can find, and he will go to earth somehow and somewhere, no one can prophesy how or where.

With regard to 2, the badgers driving the vixens and cubs out of the earths, I only wish that some of our mountain badgers would set to work to drive out a few of our all too prosperous foxes ! The belief seems to me to be based entirely upon supposition, and all my observations go to show that the presence of badgers makes for the security and prosperity of vixens and their cubs. Who can be a better judge of this than the vixen herself ? She will, if she can, share a badger sett ; she knows and is ever ready to put to good use Brock's superior architecture ; he is her friend both in her hours of need and in her hours of happy anticipation, and she will follow him where he goes from hill to valley. In certain parts of the United States the foxes have been able to hold out only where badgers and badger earths are to be found. They have gone, or all but gone, even before the jackals, from much of the richest prairie, but everywhere that badgers are abundant the foxes have prospered long after the jackals are gone. In this, surely, lies the answer to a multitude of questions as concerns



the relationship between fox and badger, and Sir Alfred Pease, who lived in fox-hunting country and was no stranger to the sport, states definitely that "in order to persuade foxes to take to a particular covert, no surer method can be pursued than to get badgers to make earths where they are required." As an impartial historian, however, I am compelled to give also the evidence Sir Alfred subsequently furnishes in the same chapter. He says: "My suspicions of a badger's capabilities to wage war on foxes were first aroused some years ago. The badgers had made a fine double set of earths on the north side of a hill in a neighbouring larch wood, where no effort on my part to get foxes to breed and stay had succeeded. No sooner, however, was a colony of badgers established than foxes haunted the holes and covert. In a succession of years there was as certain to be a litter of fox cubs in the badger earth as a sunrise on the morrow.

"What happened each spring was that the foxes and badgers frequented both sets indiscriminately till about March. When the vixen lay in the badgers abandoned the set of holes where she was, and restricted themselves to the other set some twenty yards distant. Year after year the fox cubs prospered and grew up, till one summer the keeper found a fox cub in a field with his head bitten in two and terribly worried. I

did not know how to account for it. I watched the vixen and the other cubs one evening to see that they were all right, and saw them, but found they had left the earth and were in the covert. For two years all went well and foxes were unmolested, and then occurred something that gave me a clue to the death of the cub three years before. Two vixens lay in at the badgers' earth, and brought up their families of seven and four respectively, till they were about one-third grown. There were then to my knowledge at least two earths. On one or two occasions the stillness of the night was broken by the veriest pandemonium at the earth, but still I did not think much of it. At the end of the hunting season, at the end of April, when the cubs were seven or eight weeks old, and a fortnight after the hounds had been through the coverts, I found the largest and finest of the vixens dead, and thought that, in spite of the earths being open, she must have been chopped by the hounds. A post-mortem examination, as well as the improbability of a vixen with cubs being out in the early part of the day, convinced me that she had not been killed by hounds. She seemed to have been badly bitten through the legs and thighs, but not on the body. From this time the other vixen and all the cubs left the badgers' earths and remained in the covert. It was on this occasion

that an attempt to find out how many badgers there were in these earths was rewarded by seeing seven full-grown badgers emerge from a single hole. It was rough, no doubt, that the badgers should be invaded by two large families of smelling foxes, and no doubt their patience had become exhausted. Still I could not tolerate this kind of behaviour, and so I had a dig at them, took two old ones out, and transported them to Scotland. The following year there was peace and fox cubs again. The year after, however, the vixen and her cubs took off into the covert very early after another bit of Bank Holiday business, at a time of night when all respectable people were quietly in bed. And yet, all through the year foxes are in the earth, and this spring, as heretofore, a litter of cubs has been raised, but removed to another earth at a safe distance from the badgers. I have never heard of badgers taking the offensive against foxes ; they will never molest a fox or vixen unless their earth is invaded, and in my case if I had had no badgers in this covert I should have had no foxes ; and whilst it is annoying that the fox cubs and vixen should be driven out, and perhaps occasionally killed, the drawback is slight when it is considered that as long as there are badgers there will be a litter of cubs, which nine times out of ten will get safely off."

This, I think, from so impartial an authority, sums

up the position justly and truly as regards 2 and 3. It makes clear that though there are unquestionably occasions when the badgers are harmful to the foxes, their presence on the whole is beneficial, as has been proved in many parts of the world where both foxes and badgers exist.

It is only where both are thick on the ground that bloodshed seems to occur, and commonly when a vixen is found lying out with her cubs, she is said by rural observers to "have been driven out by the badgers," whereas I have repeatedly known vixens to lay out where there are no badgers at all. In the mountains, indeed, where there is a sufficient depth of heather, many of the vixens do not seek the earth at all during the breeding season.

I would prefer not to deal with objection 4 beyond observing that if there are so many occasions on the hunting field when Brock proves so much of a friend in need to Reynard, the same must apply in the course of their ordinary lives.

On the face of things it would seem, then, that where there are badgers foxes are better able to hold out than where there are none. The badger cannot be both a friend and an enemy, and there is no happy medium. If the presence of a few badgers really favours the fox, it is time some of the old beliefs of the hunting field

died out, and that the unmanly and unsportsmanlike cruelties which I myself have known to be perpetrated upon the badger by those who in other ways are the first to uphold the traditions of sport, were made impossible by a proper and more sympathetic understanding. This opinion, I am sure, is shared by many keen followers of hounds.

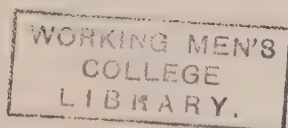
It is, of course, admitted that too many badgers do not improve the conditions of fox hunting. They must be kept down to within reasonable limits, which can best be done by the encouragement of badger clubs and sport thereby afforded.

One's sympathies are entirely with the mother badger who *does* kill a cub or two, for there is no doubt that Reynard is a source of persistent irritation to the badger kind. No sooner has a mother badger cleaned up her earth and got everything in order than a fox comes along with all his litter and stink to blast her ideas of an ideal home. I have known a badger to make a new earth for the reception of her cubs, but only to have it immediately pounced upon by a vixen. Generally both remain, the badger keeping the place sweet and tenantable, while the vixen and her cubs do their best to soil and pollute. There must be a limit to even a badger's patience, and it is not surprising to hear that the fox sometimes finds it. A fox in difficulties will

purposely den up with a badger, so that he can get behind and leave Brock to do the fighting !

Motherhood in the wild is a very strange element, and no doubt the mother badger is not immune to that spiteful jealousy of disposition to be found in so many wild mothers, above all the vixen. It is known that a jealous cubless vixen will kill other cubs if the chance goes her way simply because she has none of her own. Nor does she need to be cubless ; a vixen with cubs of her own will kill another vixen's cubs, simply in feminine spite. I knew a fox terrier bitch, one of the best of mothers, which sneaked into an outhouse and killed a whole litter of retriever puppies during the absence of their mother, and as a further example—of two hens set in the same house, one produced a fine brood, the other none at all. The unsuccessful hen thereafter showed the utmost jealousy for her successful sister, attacking her and her chicks so viciously that there was nothing for it but separate pens. That was over a year ago, but the spite and jealousy has not yet died !

In view of all this it is likely that the sow badger, irritated by fox tenants, vicious with approaching motherhood or anxious for the welfare of her cubs, may now and then slash a cub in whom familiarity has bred contempt for her presence.



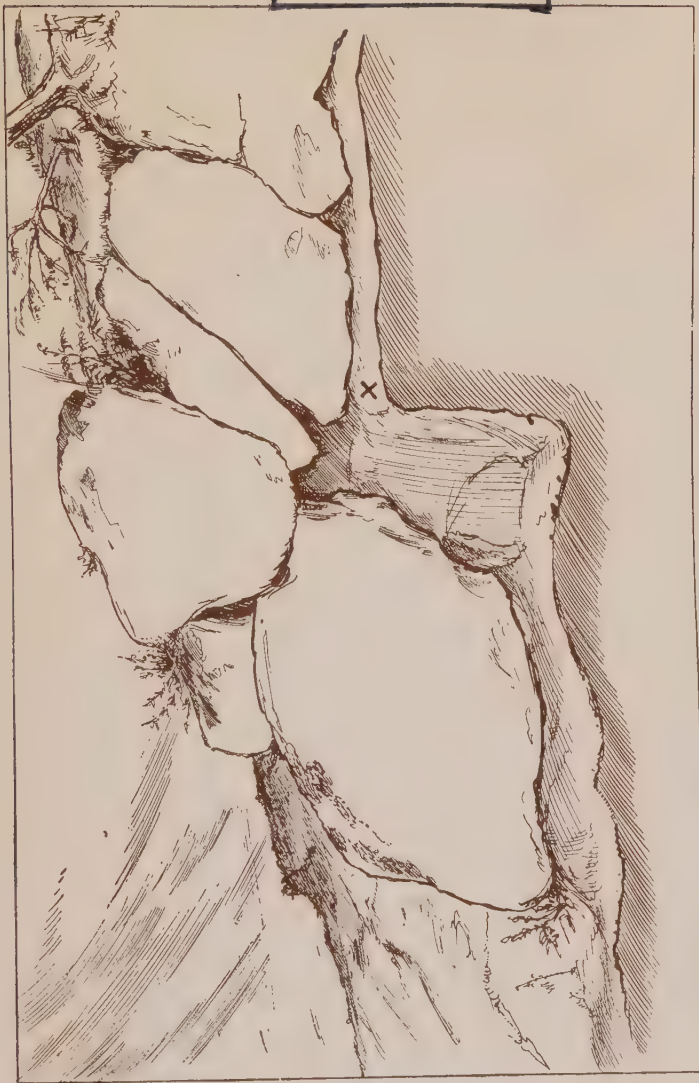


## CHAPTER X

### BROCK AS A SPORTING ANIMAL

#### Ancient Strongholds

REFERENCE has been made to a solitary badger which killed two terriers belonging to a keeper in the Bolton Abbey vicinity, and the details of this case are worth recording. The badger was run to earth in a pile of boulders, overgrown with bracken and ferns, and deeply overhung by timber in the centre of a hardwood forest, and the first terrier sent in seemed to be in difficulties, whereupon the second was dispatched supposedly to her aid. Incidentally, this is a very unwise practice in the case of a sett having only one entrance, and has led to the loss of many a good dog. For the first dog in the hole, up against the badger, cannot back out when Brock charges on account of the eagerness of the terrier behind him. Thus the second terrier, while being unable to assist, is merely a hindrance, and a perilous handicap. The charge of a badger underground is surprisingly swift, and accompanied by a maelstrom of



SECTION OF BADGER STRONGHOLD AMONG BOULDERS.

The Badger crouched at the point X when terriers entered the cairn, and, since the dogs had to leap up at him, his position was impregnable.



flying sand. No terrier that knows the game tries to stand up to it unless the ground is entirely in his favour. He backs with all speed to the prescribed line, whereupon the badger returns to his set, and waits there, his nose between his forepaws, watching keenly but silently, till the invader again oversteps the limit. The idea that the terrier goes in, seizes the badger, and forthwith concentrates all his enegry upon dragging him out, is, of course, farcical.

Having dispatched the second terrier, the keeper and his assistant listened at the mouth of the hole to the sounds of conflict directly below. After some hours, and many vain attempts to recall the dogs, they became aware of the fact that only one terrier was throwing his tongue. Towards nightfall this also ceased. They could not hear the terriers, neither could they hear the grunting of the badger. A gloomy silence had settled, and to make matters more wretched it had come on to rain a cold and miserable drizzle. The men remained till close upon midnight, then they blocked up the cairn and went home.

Next morning a horse and chains were taken to the scene, and the boulders pulled away one by one. A few feet down, the passage-way opened out into a spacious chamber, in which a man could stand and turn round in a stooping attitude. At the far end of this chamber

was a step up, probably three feet in height, and beyond it the passageway continued. At the bottom of this step lay both the terriers, dead, the head of one almost severed from its body. The badger had lain on the shelf above, so that the terriers had been compelled to leap in order to reach him. Both of them were much torn about the muzzle, and it is probable that Brock had dispatched them both by resorting to the well-known badger trick of tucking his head between his forelegs, presenting only his neck. Immediately the terrier grips he uncurls, his fangs in instant contact with his aggressor's throat.

As already stated, this badger simply disappeared, and knowing the dread that badgers have of interference from dogs, I have no doubt that he travelled far and fast ere he again settled with any degree of permanency.

The cairn in which this bloody contest occurred was of special interest, for it looked to the writer like an old badger stronghold—there in the midst of a country where Brock is to-day a rare beast. The chamber in which the terriers were killed was probably at one time a nesting chamber, and, of course, there is no way of telling how many subsequent nesting chambers were tapped by the passage-way which led on through the rocks. It is more than likely that the stronghold was

hundreds of years old, that the first nest was used at a date so early that Brock had no foes to speak of, save, possibly, the wolves.

This opens up another line of enquiry. It is generally recognised that wild animals follow in each other's steps. In Canada it is said that when a bear crosses a creek at a certain place any bear following him, even ten years later, is certain to cross at the same place, treading just where his forerunner trod. This is certainly true of otters, which year after year land at the same stages, till in some cases—as on the Tay and the Dochart—certain boulders are deeply worn by the contact of their feet and bodies as they drag themselves from the water ; and so far as my own observations go, scant as they are, it is equally true of the badger. The wandering badger is not wandering at random. He is treading a trail as old as history, which, generation after generation, his sires trod before him. He rests by day where they rested, by night he follows the same shady valleys where roots and insects are most abundant, and thus from stronghold to stronghold. So, just as there are, all over the country, places which are called the Otter's Inn or words equivalent thereto, where otters, passing over the heights from river to river, are known to rest, so there may be, and doubtless are, certain Badger Inns, where the weary traveller may be



found at rest. Such a place was the den described. Its tenants were invariably passing voyagers.

The arguments village sportsmen put forward to excuse the persecution of live badgers which have been so unfortunate as to fall into captivity have often amused me. I have been told that there is no cruelty in baiting a badger, as the terriers cannot hurt the animal, and they will take good care that the badger does not hurt them. This is, of course, true, so far as it goes. Not one terrier in a hundred will actually close with a cornered badger, or if he will he is not of much use. If that badger does not kill him another will, and in fox hunting in the Highlands we value most a terrier which will give Brock a reasonably wide berth. There is no sport in waiting all night over a cairn containing a dead terrier and a live Brock, and going home next morning too hungry to eat and too chilled to sleep. On such occasions the terrier which is too proud to fight is preferable to the foolhardy type, but generally speaking terriers know instinctively that the badger is their master, and give him no chances.

McDonald, keeper in Glenlochay, recently sent his terrier into a cairn after a vixen he had wounded. This was in the early morning, and shortly after the terrier's departure all audible sounds of conflict ceased. McDonald waited about all day, but finally he decided that the

vixen had locked her jaws on the terrier in her death grip, and that the little animal was imprisoned alongside his dead foe. McDonald visited the cairn several succeeding days, but all was silent, and finally hope died.

Eleven days later the terrier returned home. It was totally blind in one eye and could see very little out of the other. The poor little creature was in a sad state, just managing to drag itself to the door, where it was found by the household more dead than alive. Luckily it arrived at daytime, and help was immediately forthcoming.

This is one of the most remarkable examples of a terrier's endurance that I have come across, and how the dog managed to gain home over eleven miles of mountain-tops after its experiences and in its enfeebled state, is a matter of mystery. The dog had not been mauled, so there is little doubt that he became fast in the interminable corridors among which the vixen had sought shelter. I know one badger stronghold in the same glen, one exit of which is among some crags fully two hundred yards lower down the mountain face than the main entrance, and how long the inter-connecting corridors are there is no telling. The warren may, indeed, consist of a series of storeys.

The few organised badger digs in which I have taken part have been singularly remarkable for their lack of

outstanding incident, though naturally I have had many an exciting brush with Brock in the mountains of the North. Given good company, terriers of the right kind, and earth in which it is really possible to make some kind of headway, there is doubtless much amusement to be had by bearding Brock in his den. The terrier which misleads the whole company by going mad with excitement on finding a wretched little rabbit just out of reach at the end of a hole is by no means a rarity, and I remember meeting him for the first time while visiting friends in North Yorkshire. This terrier knew very well that the badger was there, for immediately she entered we heard old Brock bump off into a side corridor, whereupon the terrier emerged at far greater speed than she had entered. We were all a little amused, much to the indignation of the owner of the dog, who declared that she knew the game perfectly and was to be trusted. Down she went again, and after a minute or so she began to throw her tongue, and the diggers got to work with a will. It was amusing to watch these men. Two of them were notorious characters, who had never been known to do an honest day's work, but they would dig at a badger till the sweat streaming down their foreheads got into their eyes, which duly became full of mud. I have known them to work for hours in pursuit of sport, but in every-

day life they were too idle even to dig their own potato patch. Two or three gardeners from a neighbouring estate also "happened along," closely followed by the groom and a little later several farm labourers. It is truly miraculous how the news of a badger digging affray spreads, and it is a kind of amusement which somehow makes a special appeal to the rural Britisher. As the sounds of conflict became nearer, the men veritably fought for possession of the spade. If one digger relaxed his energies a moment the weapon was literally wrenched from his hands, and another worthy son of toil would vigorously attack the earth works. All spat on their hands at regular intervals, except the groom, who distinguished himself by hissing loudly and consistently throughout his efforts. Yet if, in that same salubrious locality, one wanted a man to hoe a bed of onions or to wash down a car, the desired help could not be obtained at any price.

After running a trench four feet in depth and about fourteen feet in length, we came upon the terrier, plastered with clay and yapping at the mouth of a side hole two inches wide. I thrust in my arm, and pulled out—an exceedingly juvenile rabbit, so juvenile, indeed, that its eyes were scarcely open !

Knowing one's dog, it is generally easy to tell by his manner of giving tongue whether it is a fox or a

badger at the other end, and of course a really keen dog ignores the presence of rabbits. The one referred to in the incident just recorded was undoubtedly afraid of Brock, and so gladly turned her attention to less formidable quarry, as a poor-spirited dog often will.

The work of the terrier is merely to locate and prevent the badger from tunnelling away from the diggers. This he does by closing immediately the badger turns to scratch, whereupon Brock wheels about and charges, and the terrier is called upon to back instantly and speedily. So he prevents the badger from scratching away from the diggers, and the idea that he goes into the hole, seizes the badger, and forthwith proceeds to drag him out, is of course absurd. No terrier on earth can shift a badger once he has dug himself in, and not one terrier in fifty could drag a much misused and half starved badger out of the right-angle box once used in badger baiting. Indeed, if a rope were round the neck of a badger cornered in his own earth and a strong man applied himself to the other end, the brock would be strangled ere he would move. The dog must speak and speak the truth.

It is not generally known that the badger is prevented from tunnelling further if one fills the hole behind him with the blade of a spade—presuming, of course, that he is in a *cul de sac* and not too far away. The



animal cannot then dispose of the earth he loosens, and soon packs himself in, while the diggers can lunch at leisure, confident that they will find the position unchanged at the conclusion of the interval.

It must be admitted that badger digging has done much in retaining a breed of terriers whose loss I should deplore even more deeply than the loss of poor Brock. What finer animal is there than a little dog, gentle and winsome in its lifelong friendship with man, yet ready, nay eager, to face a superior foe for hours on end with a courage which never wavers no matter how severe the punishment? It is no joke for a terrier to enter a strange earth and face a foe far tougher and stronger than itself, and probably close upon three times its weight, and yet how willingly and ably a terrier bred to the work does his bit, knowing that his human friends will help him in a tight corner if they can, just as he is helping them. It is the human backing which really counts; the dog works in man's service, doing his master's bidding, for in a wild state the wiser animals do not face a foe more formidable than themselves except in defence of their young. I take the liberty of again quoting the opinion of Sir Alfred Pease, this time on what constitutes a terrier of the right kind. He says: "What thousands of little curs there are called terriers, and fox-terriers that will no



more go down a fox earth than go up a chimney ! How many thousands of the best of these, however finely shaped for the show bench, that have no more idea of their profession and the duties for which nature made them, and from which they derive their name, than the man in the moon, and whose masters are satisfied if they can kill a few rats, and think them wonderfully game if they will tackle a cat !

“ From my boyhood I have had terriers, but I never thought one worth keeping that could not, or would not, go to ground and show himself or herself worthy of their honourable name. Appearance is nothing if the other qualities are not present. I have had a little wire-haired terrier bitch (with neat, golden-tanned marked head), pretty and gentle, and winning in all her ways, a companion that slept on my bed each night, and looked the picture of innocence lying by the hearth or even on a lady’s lap ; but within that bosom beat a courageous little heart, in her head throbbed a brain full of sagacious intelligence, and in that soft brown eye lurked hidden fire. She could give deep music long sustained, and she never winced before the enemy. I called her “ Worry,” a name that seemed most *mal à propos* to her casual acquaintances. For twelve long years she was at my side in all the ups and downs of life, leading the drag when I was at Cambridge, following

fox-hounds and bolting foxes when I was hunting, and my constant and daily companion, accompanying me into every county when I made an expedition against the badger."

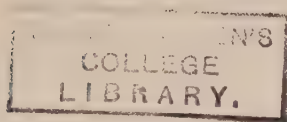
The badger clubs, with their excellent *personnel*, are doing much not only to keep up the right breed of terrier, but further in seeing that Brock is given a fair deal—taken alive when can be, and transported to another locality in which his kind have become rare. No better thing could befall the badger than that night hunting became more popular, for the best way in which to preserve any animal is to hunt it. Hitherto the badger has belonged to no one, which is to everyone.

Hunting the Brock at night-time is quite the most amusing sport in which I have ever participated, (save, perhaps, "burning the water"!) The pack should number from five to seven, and consist of dogs which, while being sure trial runners, are not too swift. The field naturally follows on foot, guided by the music of the hounds, and what with a scratch pack and a very scratch field, as was the case on both occasions when I took part in this mode of hunting in the North Riding, there is usually no dearth of merriment, and generally a kill of some kind, if not of a badger.

The meet takes place about three hours after sunset,

and one or two experienced hands who know the country are sent out to peg bags over the most likely setts, so that a badger returning in a hurry finds himself bagged. These men hide near the warrens so that they can attend the bags, and the hounds are taken to work the adjoining cover somewhere within a radius of three miles. Brock will generally hide until the hounds are pretty well on top of him, when he takes to his heels. The hounds do not endeavour to close, or if they do they are usually fought off in very quick time, and so a rough and tumble chase ensues to the nearest earth. Sometimes, but not generally, Brock will turn at bay if the hounds are too keen, and the field obtains a good view of him. Usually he keeps moving, often at an astounding speed, finally to go to earth in the one sett the bag men did not see fit to cover. As a rule the chase is an entirely bloodless affair, except in so far as the field is concerned, for scratches and tumbles are taken as part of the night's outing. If, in addition, one actually succeeds in bagging a badger, the crowning glory is, of course, achieved, and from my own experience this kind of hunting is far more likely to give results, and in a more pleasurable way, than is digging. Sometimes a badger will put up quite a good run of four or even five miles, which is far enough in view of the circumstances ; two or three miles is more general.

On the occasion of one of these hunts in which I took part, a portly publican accompanying us was left far in the rear of the proceedings, and in hurriedly climbing an old boundary wall he brought down the whole structure on top of himself. Fortunately he was not hurt, but such was his position that he could not free himself from the inelegant position into which he had fallen, and mistaking his shouts for aid as part of the general tally-ho, the rest of us went heartlessly on in pursuit of the hounds. It was not till about four hours later that we discovered his absence, and lame and tired though most of us were, there was nothing for it but to go over the ground again ! When we found him he indicated his gratitude in very strange language !





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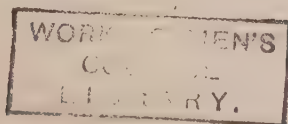
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